

HFUS 3 BOU 142200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 074

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 14 MAR 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/2100 TO 14/2100Z: SOLAR ACTIVITY WAS HIGH DURING THE PAST 24 HOUR PERIOD. REGION 4433 (S12W48) PRODUCED A M2/2B EVENT AT 14/0334Z WITH ASSOCIATED TYPE II / TYPE IV RADIO SWEEPS AND A 10CM BURST (2695MHZ) OF 318 SFU. A SECOND M2 X-RAY EVENT AT 14/1945Z WAS NOT CORRELATED TO ANY REGION, BUT PROMINENT LOOPS AT THE NE LIMB PROBABLY WERE THE SOURCE. 1 NEW REGION NUMBERED 4440 (N17E48): WAS A SIMPLE A-TYPE WITH DEVELOPING TRAILER SPOTS AND ARCHED FILAMENT SYSTEM.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE THROUGHOUT THE FORECAST PERIOD. REGION 4433 PROVIDES A VERY SLIGHT TO SLIGHT CHANCE OF HIGH LEVEL ACTIVITY. RETURNING REGION 4421 (N16,L-112) ALSO CONTRIBUTES TO MAINTAINING A MODERATE TO HIGH LEVEL FOR THE NEXT 3 DAYS AND FOR THE OUTLOOK.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 13/2100Z TO 14/2100Z: GEOMAGNETIC ACTIVITY WAS UNSETTLED TO ACTIVE DURING THE PAST 24 HOUR PERIOD. BRIEF STORM LEVEL REPORTS FROM THULE WERE NOTED. A SATELLITE LEVEL PROTON EVENT STARTED AT 14/0405Z WITH A MAXIMUM VALUE OF 100 P/CM²/SEC/STER AT 14/0505Z. IT LAST FELL BELOW THE 10 UNIT THRESHOLD AT 14/1945Z. THIS PROTON EVENT WAS ATTRIBUTED TO THE REGION 4433 EVENT AT 14/0334Z.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE ACTIVE THROUGHOUT THE FORECAST PERIOD. MINOR STORM LEVELS ARE EXPECTED AT MID AND HIGH LATITUDES DURING NIGHT-TIME PERIODS. THE CHANCE OF PROTON EVENTS IS EXPECTED TO BE AT A SLIGHT LEVEL THROUGHOUT THE PERIOD.

III. EVENT PROBABILITIES 15 MAR-17 MAR

CLASS M 95/95/95

CLASS X 10/15/20

PROTON 25/30/25

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 MAR 122

PREDICTED 15 MAR-17 MAR 130/135/140

90 DAY MEAN 14 MAR 119

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 13 MAR 016/019

ESTIMATED AFR/AP 14 MAR 010/013

PREDICTED AFR/AP 15 MAR-17 MAR 020/020-020/020-020/025

SOLTERWARN

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