

HFUS 3 BOU 142200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 045

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 14 FEB 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/2100 TO 14/2100Z: SOLAR ACTIVITY HAS CONTINUED LOW DURING THE PAST 24 HOURS. REGION 4410 (S11W71) PRODUCED ALL THE X RAY EVENTS OBSERVED THIS PERIOD THE LARGEST WAS A C4/SB AT 0135UT, ONLY MINOR RADIO OBSERVED WITH THE EVENT. REGION 4410 HAS EXHIBITED MINOR AREA DECAY THIS PERIOD WHILE REGION 4413 (S13W36) HAS REMAINED STABLE IN AREA AND MAGNETIC CONFIGURATION. TWO NEW REGIONS NUMBERED TODAY 4419 (N07E63) IS A SMALL C TYPE AND 4420 (S22E72) A SMALL A TYPE GROUP. REGION 4419 HAS BEEN OBSERVED AS SHOWING RAPID GROWTH DURING THE PAST TWO HOURS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW DURING THIS FORECAST PERIOD. REGIONS 4410 AND 4413 MAY PRODUCE AN ISOLATED M CLASS EVENT DURING THIS FORECAST PERIOD.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 13/2100Z TO 14/2100Z: THE GEOMAGNETIC FIELD HAS BEEN GENERALLY AT MINOR STORM, MAJOR STORM AT THE HIGH LATITUDE SITES, DURING THE PAST 20 HOURS. THIS ACTIVITY IS THOUGHT TO BE FROM SEVERAL FILAMENTS AND M CLASS EVENTS WHICH OCCURRED 4 TO 5 DAYS AGO. THE LARGE SCALE SOLAR MAGNETIC FIELD EXHIBITS MAJOR CHANGE FROM THE LAST ROTATION BETWEEN CARRINGTON LONGITUDES 335 AND 255 DEGREES THIS COULD ALSO HAVE HELPED CAUSE THE RECENT MAGNETIC DISTURBANCE.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE AT ACTIVE LEVELS, SHORT PERIODS AT STORM LEVELS, DURING MOST OF THIS FORECAST PERIOD.

III. EVENT PROBABILITIES 15 FEB-17 FEB

CLASS M 15/10/05

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 FEB 129

PREDICTED 15 FEB-17 FEB 124/120/118

90 DAY MEAN 14 FEB 106

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 13 FEB 024/036

ESTIMATED AFR/AP 14 FEB 035/044 A. Ap

PREDICTED AFR/AP 15 FEB-17 FEB 015/025-012/015-015/015

SOLTERWARN

BT