

HFUS 3 BOU 132200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 044

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 13 FEB 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 12/2100 TO 13/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS WITH ONLY SMALL C CLASS EVENTS OBSERVED. REGION 4413 (S13W23) PRODUCED MOST OF THE FLARES OBSERVED. REGION 4413 IS NOW A BETA DELTA AS THE MAGNETIC GRADIENTS HAVE CONTINUED TO RELAX WHILE THE AREA HAS REMAINED GENERALLY UNCHANGED THIS PERIOD. REGION 4410 (S09W58) HAS REMAINED LITTLE CHANGED THIS PERIOD. NO NEW REGIONS WERE OBSERVED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW WITH A CHANCE FOR AN ISOLATED M CLASS EVENT FROM REGION 4413. THE DECAY IN THE MAGNETIC CONFIGURATION OF REGION 4413 MAKES LARGE EVENTS LESS LIKELY THIS FORECAST PERIOD UNLESS RAPID CHANGE OCCURS. OLD ACTIVE REGION 4397 IS DUE BACK NEAR THE END OF THIS FORECAST AND MAY CAUSE AN INCREASE IN SOLAR ACTIVITY DURING THE LAST DAY OF THE FORECAST HOWEVER VERY FEW REGIONS HAVE BEEN ACTIVE FOR MORE THAN ONE ROTATION.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 12/2100Z TO 13/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO MINOR STORM LEVELS, MAJOR STORM PERIODS AT THE HIGH LATITUDE SITES, DURING THE PAST 24 HOURS. THIS ACTIVITY IS THOUGHT TO BE FROM THE SEVERAL SMALL M CLASS EVENTS OF THE PAST WEEK ALONG WITH SOME FILAMENT DISAPPEARANCES WHICH WERE OBSERVED NEAR REGION 4413 ON 08 FEB.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE AT ACTIVE LEVELS, SHORT PERIODS AT STORM LEVELS GENERALLY DURING THE NIGHTTIME SECTORS, FOR THE NEXT 36 HOURS THEN UNSETTLED FOR THE REST OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 14 FEB-16 FEB

CLASS M 30/20/15

CLASS X 05/01/01

PROTON 01/01/01

PCAF ----- GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 FEB 132

PREDICTED 14 FEB-16 FEB 128/124/128

90 DAY MEAN 13 FEB 106

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 12 FEB 014/011

ESTIMATED AFR/AP 13 FEB 025/040

PREDICTED AFR/AP 14 FEB-16 FEB 015/020-012/015-012/015

SOLTERWARN

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