

HFUS3 BOU 172200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 048

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 17 FEB 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/2100 TO 17/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4626 (S11W41) DECAYED TO A SIMPLE ALPHA-TYPE. REGIONS 4625 (N01W57) AND 4627 (S07W22) RETAINED ONLY SCATTERED, FAINT PLAGE AREAS. A B1.2 X-RAY EVENT AT 17/2010Z WAS ATTRIBUTED TO A 14 DEGREE LONG DISAPPEARING FILAMENT SOUTH OF REGION 4626 CENTERED AT S21W22. A TYPE II RADIO SWEEP ACCOMPANIED IT WITH AN ESTIMATED SHOCK SPEED OF 1100 KM/S. A LATER B-LEVEL X-RAY EVENT EXTENDED THROUGH THE END OF THE PERIOD. NO NEW REGION WAS ASSIGNED. AN EIGHT DEGREE LONG FILAMENT DISAPPEARED FROM N45W26 AT 16/2146Z.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. RETURNING REGION 4622 (S14, CAR-300) IS EXPECTED AT 18/1600Z WITHOUT SIGNIFICANT ACTIVITY POTENTIAL.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 16/2100Z TO 17/2100Z: GEOMAGNETIC ACTIVITY WAS UNSETTLED-TO-ACTIVE. MINOR STORM LEVELS WERE REPORTED AT MID LATITUDES AT 17/1500Z. HIGH LATITUDES REPORTED MINOR LEVELS AT 17/0600 AND 1500Z, WITH MAJOR STORM LEVELS FROM 1630 TO 1930Z. THIS DISTURBANCE WAS ATTRIBUTED TO A COMBINATION OF SEVERAL MINOR DISAPPEARING FILAMENTS OF 12-16 FEB AND RECURRENT ACTIVE CARRINGTON LONGITUDES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT ACTIVE-TO-MINOR STORM LEVELS. THE COMBINATION OF SEVERAL MINOR DISAPPEARING FILAMENTS PLUS THE RECURRENT ACTIVE CARRINGTON LONGITUDES SHOULD SUPPORT BRIEF MAJOR STORM LEVELS AT HIGH LATITUDES IN THE FIRST AND SECOND DAYS (18-19 FEB). MID LATITUDES SHOULD BE AT GENERALLY ACTIVE LEVELS DECREASING TO UNSETTLED CONDITIONS ON THE THIRD DAY (20 FEB). THE OUTLOOK IS FOR UNSETTLED ACTIVITY FOR FEB 21-23, WITH A POSSIBILITY OF ACTIVE TO MINOR STORM LEVELS ON THE LAST DAY (24 FEB).

III. EVENT PROBABILITIES 18 FEB-20 FEB

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 FEB 073

PREDICTED 18 FEB-20 FEB 072/072/071

90 DAY MEAN 17 FEB 076

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 16 FEB 007/009

ESTIMATED AFR/AP 17 FEB 013/015

PREDICTED AFR/AP 18 FEB-20 FEB 015/020-016/020-014/015

SOLTERWARN

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