

HFUS3 BOU 182200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 077

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 18 MAR 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/2100 TO 18/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW FOR THE PAST 24 HOURS. TWO NEW REGIONS WERE NUMBERED TODAY. NEWLY ASSIGNED REGION 4634 (S11E36) EMERGED AS AN AXB SPOT GROUP AND HAS DEVELOPED INTO A BXO SPOT GROUP WITH A BETA-TYPE MAGNETIC CLASSIFICATION. THIS REGION PRODUCED A SUBFAINT FLARE AT 18/1159UT. THE OTHER NEW REGION WAS NUMBERED REGION 4635 (N06W66) WHICH IS AN ALPHA-TYPE MAGNETIC CLASSIFICATION. REGION 4633 (S12E18) IS CURRENTLY A CRO-SPOT GROUP WITH A BETA-TYPE MAGNETIC CLASSIFICATION. THERE WERE TWO DISAPPEARING FILAMENTS IN THE PAST 24 HOURS, ONE S35W37 AND ANOTHER AT N44W25.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN VERY LOW. HOWEVER, WITH THE PRESENCE OF REGION 4633 AND REGION 4634 THE POTENTIAL FOR LOW LEVEL ACTIVITY IS POSSIBLE.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 17/2100Z TO 18/2100Z: THE GEOMAGNETIC FIELD WAS GENERALLY UNSETTLED. AN ISOLATED DISTURBANCE FROM 0300-0900UT YIELDED ACTIVE CONDITIONS AT LOWER LATITUDES WITH MINOR TO MAJOR STORM CONDITIONS AT THE HIGHER LATITUDES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE UNSETTLED ON THE FIRST DAY OF THE FORECAST PERIOD. UNSETTLED TO ACTIVE CONDITIONS ARE EXPECTED TO PREVAIL FOR THE REST OF THE PERIOD. THE INCREASE IN ACTIVITY IS FORECAST BASED ON RECURRENT PATTERNS.

III. EVENT PROBABILITIES 19 MAR-21 MAR

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 MAR 075

PREDICTED 19 MAR-21 MAR 075/075/073

90 DAY MEAN 18 MAR 073

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 17 MAR 007/010

ESTIMATED AFR/AP 18 MAR 010/015

PREDICTED AFR/AP 19 MAR-21 MAR 010/015-010/020-015/020

SOLTERWARN

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