

HFUS 3 BOU 272200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 087

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 27 MAR 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 26/2100 TO 27/2100Z: SOLAR ACTIVITY HAS BEEN LOW. HOWEVER, AN M1 FLARE OCCURRED AT 272012Z (MAX) AND THE FREQUENCY OF OCCURRENCE OF SMALL FLARES HAS INCREASED. THIS INCREASE IS DUE TO REGION 4455 (S14E67) WHICH APPEARS TO BE FULLY ON THE DISK AND RATHER DYNAMIC. ITS E TYPE SPOT GROUP IS A BETA GAMMA MAGNETICALLY AND THE PLAGE SHOWS FLUCTUATIONS, POINT BRIGHTENINGS AND CONTAINS AN ACTIVE FILAMENT. REGION 4449 (S14W27) HAS DECAYED SIGNIFICANTLY OVER THE PAST 24 HOURS AND IS NOT LIKELY TO POSE ANY FURTHER THREAT. REGION 4454 (S10E49) CONTINUES TO GROW SLOWLY AND IS NOW A SMALL D TYPE GROUP. THE REST OF THE DISK HAS NOT CHANGED MUCH.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO INCREASE SLIGHTLY OVER THE NEXT THREE DAYS. REGION 4455 IS LIKELY TO PRODUCE M LEVEL FLARES DURING THIS PERIOD.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 26/2100Z TO 27/2100Z: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO ACTIVE.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE GENERALLY ACTIVE FOR THE NEXT THREE DAYS. A CORONAL HOLE IS EXPECTED TO INFLUENCE THE FIELD DURING THIS PERIOD.

III. EVENT PROBABILITIES 28 MAR-30 MAR

CLASS M 50/50/50

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 27 MAR 130

PREDICTED 28 MAR-30 MAR 137/140/142

90 DAY MEAN 27 MAR 124

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 26 MAR 014/015

ESTIMATED AFR/AP 27 MAR 017/025

PREDICTED AFR/AP 28 MAR-30 MAR 020/025-020/025-016/020

SOLTERWARN

BT