

HFUS 3 BOU 042200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 185

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 04 JUL 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 03/2100Z TO 04/2100Z: SOLAR ACTIVITY HAS BEEN LOW. A BRIGHT SURGE ON THE LIMB WAS ACCOMPANIED BY C1 LEVEL X-RAYS AND A WEAK TYPE II RADIO EVENT AT 03/2328Z FROM THE NW LIMB. THESE ARE BELIEVED TO BE FROM REGION 4222 WHICH ROTATED OFF THE DISK TWO DAYS AGO. REGION 4235 (S20E38) PRODUCED MOST OF THE FLARE ACTIVITY THIS PERIOD. THIS REGION IS NO LONGER GROWING RAPIDLY IN WHITE LIGHT, BUT IT IS RESTRUCTURING. REGION 4236 (S11E58) HAS GROWN RAPIDLY WHILE REGION 4234 (S11E50) HAS GROWN SLOWLY AND HAD AN ARCH FILAMENT SYSTEM THIS PERIOD. THESE LAST 3 REGIONS ARE NOW CONNECTED BY PLAGE RIBBONS IN H-ALPHA. NO NEW REGIONS WERE NUMBERED TODAY BUT PLAGE REGION 4231 (S12W53) IS AGAIN DISPLAYING SPOTS AND IS NOW A GROWING CLASS B GROUP.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW. HOWEVER, REGION 4235 HAS THE POTENTIAL TO PRODUCE ISOLATED M CLASS FLARES.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 03/2100Z TO 04/2100Z: THE GEOMAGNETIC FIELD WAS UNSETTLED FOR THE PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN UNSETTLED UNTIL THE LATTER PART OF 05 JULY. ACTIVE CONDITIONS SHOULD THEN PREVAIL WITH SOME MINOR STORM LEVELS EXPECTED ON 07 JULY.

III. EVENT PROBABILITIES 05 JUL-07 JUL

CLASS M 35/30/30

CLASS X 05/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 JUL 133

PREDICTED 05 JUL-07 JUL 140/150/155

90 DAY MEAN 04 JUL 133

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 03 JUL 009/011

ESTIMATED AFR/AP 04 JUL 008/015

PREDICTED AFR/AP 05 JUL-07 JUL 015/020-015/020-020/030

SOLTERWARN

BT