

FUS 3 BOU 182200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 108

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 18 APR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/2100 TO 18/2100Z: SOLAR ACTIVITY BECAME MODERATE AT 18/0122UT WHEN A M6, NO OPTICAL FLARE, WAS RECORDED FROM SE11 TYPE II/IV SWEEPS ALONG WITH OTHER MINOR RADIO, 41 FLUX UNITS AT 2695MHZ, AND LOOPS OUT TO .06 RADII WERE ALSO OBSERVED. SPOTS HAVE NOW ROTATED ONTO THE VISIBLE DISK AND THE REGION IS NUMBERED 4150 (S10E84) LIMB PROXIMITY PREVENTS DETAILED ANALYSIS AT THIS TIME. REGION 4144 (N23W11) HAS PRODUCED TWO SMALL FLARES THIS PERIOD HOWEVER, THE REGION IS CURRENTLY SPOTLESS. REGION 4148 (S29W52) IS NOW A "D" TYPE GROUP AND A BETA GAMMA BUT HAS STOPPED ITS RAPID GROWTH AND HAS BEEN GENERALLY STABLE DURING THE PAST 10 HOURS. NEW REGIONS TODAY ARE 4150, 4151 (N11E44) SIMPLE A TYPE GROUP AND 4152 (S23E52) WHICH HAS PRODUCED TWO SMALL FLARES TODAY THE REGION IS REPORTED TO HAVE ARCH FILAMENTES.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE DUE TO REGION 4150. REGION 4148 MAY PRODUCE AN ISOLATED M CLASS EVENT DURING THE NEXT THREE DAYS.

OLD REGION 4127 (S16 L126) IS DUE BACK ON 21 APRIL IT PRODUCED SEVERAL SMALL EVENTS LAST ROTATION.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 17/2100Z TO 18/2100Z: THE GEOMAGNETIC FIELD HAS BEEN GENERALLY UNSETTLED AT MID-LATITUDES AND UNSETTLED TO ACTIVE AT THE HIGH LATITUDE SITES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO CONTINUE UNSETTLED AT THE MID-LATITUDE SITES WITH PERIODS OF ACTIVE CONDITIONS AT THE HIGH LATITUDE SITES. THE M6 EVENT OF TODAY IS NOT EXPECTED TO PRODUCE MUCH IF ANY INCREASE IN THE MAGNETIC FIELD ON THE THIRD DAY.

III. EVENT PROBABILITIES 19 APR-21 APR

CLASS M 40/40/40

CLASS X 10/10/10

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 APR 120

PREDICTED 19 APR-21 APR 121/122/123

90 DAY MEAN 18 APR 120

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 17 APR 017/022

ESTIMATED AFR/AP 18 APR 012/015

PREDICTED AFR/AP 19 APR-21 APR 010/015-010/015-015/015

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