

HFUS 3 BOU 212200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 111

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 21 APR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/2100 TO 21/2100Z: SOLAR ACTIVITY REMAINED LOW DURING THIS PERIOD. THE LARGEST EVENT RECORDED WAS A C7, NO OPTICAL, AT 2048UT. ONLY MINOR RADIO WAS OBSERVED WITH THIS EVENT. REGIONS 4148 (S29W90) AND 4150 (S11E44) ARE BOTH ~~MAGNETICALLY~~ COMPLEX AND OF LARGE SIZE, HOWEVER THEY HAVE BEEN GENERALLY QUIET PRODUCING ONLY SMALL "C" CLASS EVENTS. NEW REGION 4154 (S11E82) HAS BEEN BRIGHT AND SEVERAL SMALL "C" CLASS EVENTS HAVE BEEN RECORDED. A BRIGHT SURGE ON THE LIMB, OUT TO .18 RADII, OCCURRED AT 1849UT THIS EVENT MAY HAVE BEEN BEHIND 4154 AS SEVERAL SMALL SURGES ARE BEING OBSERVED FROM SE7 TO SE18.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE AS REGION 4148 AND 4150 CONTINUE TO BE OF SIZE AND COMPLEXITY TO PRODUCE AN ~~ISOLATED~~ "M" CLASS EVENT. NEW REGION 4154, OR REGIONS BEHIND THE EAST LIMB, MAY BECOME A THREAT.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 20/2100Z TO 21/2100Z: THE GEOMAGNETIC FIELD HAS BEEN GENERALLY QUIET TO UNSETLED AT THE MID-LATITUDE SITES. THE HIGH-LATITUDE SITES HAVE HAD SHORT PERIODS OF ACTIVE TO MINOR STORM CONDITIONS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE FIELD IS EXPECTED TO BE ACTIVE DURING THIS FORECAST PERIOD DUE TO RECURRENCE OF CORONAL HOLE ACTIVITY.

III. EVENT PROBABILITIES 22 APR-24 APR

CLASS M 20/20/20

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 APR 132

PREDICTED 22 APR-24 APR 129/125/123

90 DAY MEAN 21 APR 120

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 APR 011/016

ESTIMATED AFR/AP 21 APR 010/018

PREDICTED AFR/AP 22 APR-24 APR 025/030-015/030-020/030

SOLTERWARN

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