

HFUS 3 BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 140

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 19 MAY 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/2100 TO 19/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE THIS PERIOD. REGION 4481 (N09W94) PRODUCED A M1/1N FLARE AT 0746 UT. THE OTHER EVENTS OF THIS PERIOD WERE LIMITED TO C LEVEL X-RAY FLARES, OPTICAL SUBFLARES AND MINOR RADIO BURSTS. REGION 4492 (S11E61) IS THE MOST IMPRESSIVE SPOT GROUP ON THE DISK, WITH A F TYPE SPOT CLASSIFICATION AND A BETA GAMMA DELTA MAGNETIC CONFIGURATION. THIS GROUP HAS SHOWN SOME GROWTH IN THE LEADER PORTION, AND HAS BEEN THE MOST PROLIFIC FLARE PRODUCING REGION ON THE DISK. REGION 4490 (S14E05) HAS PRODUCED A COUPLE OF OPTICAL SUBFLARES TODAY, BUT HAS SHOWN ONLY SLIGHT GROWTH. TWO NEW REGIONS WERE NUMBERED TODAY, 4493 (S16W39) AND 4494 (S11E81). THESE SPOT GROUPS HAVE B AND C TYPE SPOT CLASSIFICATIONS, RESPECTIVELY. REGION 4494 IS POSSIBLY THE RETURN OF THE LEADER PORTION OF OLD SPOT GROUP 4476. THE REMAINDER OF THE DISK IS STABLE AT THIS TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN MODERATE THROUGHOUT THE FORECAST PERIOD. REGIONS 4492 AND 4494 ARE THE MOST LIKELY CANDIDATES FOR SIGNIFICANT FLARE ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 18/2100Z TO 19/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO STORM LEVELS, AT ALL LATITUDES, THIS PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD SHOULD BE AT ACTIVE TO STORM LEVELS, AT ALL LATITUDES, THROUGHOUT THE FORECAST PERIOD. THIS ACTIVITY, DUE TO RECURRENT CORONAL HOLE STREAMS, IS EXPECTED TO BEGIN LATE ON THE 20TH.

III. EVENT PROBABILITIES 20 MAY-22 MAY

CLASS M 70/70/70

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 MAY 134

PREDICTED 20 MAY-22 MAY 136/138/141

90 DAY MEAN 19 MAY 131

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 18 MAY 011/016

ESTIMATED AFR/AP 19 MAY 021/030

PREDICTED AFR/AP 20 MAY-22 MAY 015/020-020/025-030/030

SOLTERWARN

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