

HFUS 3 BOU 242200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 115

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 24 APR 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/2100 TO 24/2100Z: SOLAR ACTIVITY HAS BEEN HIGH THIS PERIOD. REGION 4474 (S13E43) PRODUCED A X1/2B FLARE AT 0339 UT. THIS FLARE FOLLOWED THE PATTERN OF MOST OF THE SIGNIFICANT FLARES PRODUCED BY THIS REGION, IT WAS IMPULSIVE. MINOR RADIO BURSTS ACCOMPANIED THE EVENT. REGION 4474 CONTINUES TO GROW IN AREA AND HAS MAINTAINED IT'S F TYPE SPOT CLASSIFICATION.

MAGNETICALLY THE REGION IS COMPLEX WITH A BETA GAMMA DELTA CONFIGURATION. NO NEW REGIONS WERE NUMBERED THIS PERIOD AND THE REMAINDER OF THE DISK IS STABLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE MODERATE TO HIGH THROUGHOUT THE FORECAST PERIOD. THE COMPLEX NATURE OF REGION 4474 MAKES IT A LIKELY CANDIDATE FOR SIGNIFICANT FLARE ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 23/2100Z TO 24/2100Z: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED, 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. THE EXPECTED RISE IN ACTIVITY IS DUE TO RECURRENT CORONAL HOLE STREAMS.

III. EVENT PROBABILITIES 25 APR-27 APR

CLASS M 90/90/90

CLASS X 25/25/25

PROTON 05/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 APR 141

PREDICTED 25 APR-27 APR 144/147/150

90 DAY MEAN 24 APR 131

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 23 APR 006/009

ESTIMATED AFR/AP 24 APR 009/014

PREDICTED AFR/AP 25 APR-27 APR 030/040-022/030-018/025

SOLTERWARN

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