

HFUS 3 BOU 232200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 114

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 23 APR 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/2100 TO 23/2100Z: SOLAR ACTIVITY HAS BEEN HIGH THIS PERIOD. REGION 4474 (S12E56) HAS PRODUCED SEVERAL M CLASS X-RAY FLARES, THE LARGEST WAS A M7 THAT OCCURRED AT 1555 UT. A 1B OPTICAL FLARE WAS ASSOCIATED WITH THIS X-RAY EVENT, AS WELL AS A 280 FLUX UNIT 2695 MHZ RADIO BURST. REGION 4474 HAS COMPLETELY ROTATED ONTO THE VISIBLE DISK AND IS A VERY IMPRESSIVE REGION. IT NOW HAS A BETA GAMMA DELTA MAGNETIC CONFIGURATION TO GO ALONG WITH IT'S F TYPE SPOT CLASSIFICATION. NO NEW REGIONS WERE NUMBERED THIS PERIOD AND THE REMAINDER OF THE DISK APPEARS STABLE AT THIS TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE MODERATE TO HIGH THROUGHOUT THE FORECAST PERIOD. REGION 4474 IS THE MOST LIKELY CANDIDATE FOR ANY SIGNIFICANT FLARE ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 22/2100Z TO 23/2100Z: 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. THIS ACTIVITY IS DUE TO THE EXPECTED RETURN OF RECURRENT CORONAL HOLE STREAMS.

III. EVENT PROBABILITIES 24 APR-26 APR

CLASS M 90/90/90

CLASS X 20/20/20

PROTON 05/05/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 APR 133

PREDICTED 24 APR-26 APR 135/137/137

90 DAY MEAN 23 APR 131

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 APR 004/008

ESTIMATED AFR/AP 23 APR 007/012

PREDICTED AFR/AP 24 APR-26 APR 030/040-040/040-022/030

SOLTERWARN

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