

HFUS 3 BOU 022200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 123

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 02 MAY 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 01/2100 TO 02/2100Z: SOLAR ACTIVITY WAS MODERATE. REGION 4474 (S13W59) PRODUCED ONE M2/0B EVENT AT 2/1927Z WITH 560 SFU AT 245MHZ; ONE C7/0B EVENT AT 2/1619Z AND A FEW LOW-LEVEL C-CLASS X-RAY EVENTS WITH SUB-FLARES EARLIER, BUT NO SIGNIFICANT ASSOCIATED RADIO BURSTS. IT CONTINUED TO DECAY IN AREA AND LONGITUDENAL EXTENT. IT HAD ONE MAGNETIC DELTA POINT REMAINING IN ITS CENTRAL PORTION, AND ITS SPOT NUMBER INCREASED SLIGHTLY. A RECENT BRIGHT SURGE WAS REPORTED. REGION 4476 (S12W33) PRODUCED ONE LOW LEVEL C-CLASS X-RAY WITH SUB-FLARE, AND HAD ACTIVE DARK FILAMENTS. NO NEW REGION WAS ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE. REGION 4474 PROVIDES A GOOD CHANCE OF MODERATE LEVELS AND A VERY SLIGHT CHANCE OF HIGH LEVELS. RETURNING REGION 4471 (N04, CAR-153) PRODUCED FOUR M-LEVEL X-RAY EVENTS AND FOUR IMPORTANCE ONE FLARES LAST ROTATION. IT IS EXPECTED AT 5/2200Z AND SHOULD COMPENSATE FOR REGION 4474 NEARING THE WEST LIMB AS FAR AS ACCUMULATIVE PROBABILITIES CONTINUING AT THE LOW TO MODERATE LEVEL THROUGHOUT THE PERIOD AND OUTLOOK.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 01/2100Z TO 02/2100Z: GEOMAGNETIC ACTIVITY WAS ACTIVE. THE 10 MEV PROTON EVENT ENDED AT 2/0855Z. A MAXIMUM OF 15 P/CM²/SEC/STER AT 2/0140Z WAS OBSERVED AT SATELLITE ALTITUDES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE UNSETLED-TO-ACTIVE THROUGHOUT THE FIRST AND SECOND DAYS (3-4 MAY). ACTIVE-TO-MINOR STORM LEVELS ARE EXPECTED ON THE THIRD DAY (5 MAY), IN ACCORDANCE WITH HISTORICALLY ACTIVE CARRINGTON LONGITUDES. STORM LEVELS ARE EXPECTED AT HIGH LATITUDES FROM 5 MAY UNTIL 7 MAY.

III. EVENT PROBABILITIES 03 MAY-05 MAY

CLASS M 60/50/50

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 02 MAY 142

PREDICTED 03 MAY-05 MAY 134/127/120

90 DAY MEAN 02 MAY 130

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 01 MAY 020/027

ESTIMATED AFR/AP 02 MAY 015/020

PREDICTED AFR/AP 03 MAY-05 MAY 010/015-010/015-020/025

SOLTERWARN

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