

HFUS 3 BOU 052200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 126

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 05 MAY 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 04/2100 TO 05/2100Z: SOLAR ACTIVITY WAS MODERATE. NEW REGION 4480 (N01E76) PRODUCED AN M7/0F EVENT AT 5/1207Z. ALTHOUGH ONLY SEEN AS A HSX CLASSIFICATION IN WHITE LIGHT, ONE TRAILING SPOT WAS REPORTED AT THE PERIOD'S END. LONG LASTING LOOPS ASSOCIATED WITH DECI METRIC RADIO BURSTS PORTEND MORE SPOTS AND ACTIVITY EAST-NORTH-EAST OF THE PRESENT LOCATION. REGION 4474 (S15W91) PRODUCED AN M7 X-RAY EVENT AT 5/1827Z WITH DECI METRIC RADIO BURSTS AND ADDITIONAL TYPE II AND IV RADIO SWEEPS. LOOPS AND BRIGHT SURGES WERE REPORTED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE. REGION 4480 SHOULD PROVIDE SLIGHT CHANCE OF HIGH LEVELS. REGION 4474 WILL STILL PROVIDE A FAIR CHANCE OF MODERATE LEVELS AND A VERY SLIGHT CHANCE OF HIGH LEVELS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 04/2100Z TO 05/2100Z: GEOMAGNETIC ACTIVITY WAS ACTIVE. MINOR STORM LEVELS WERE REPORTED AT HIGH LATITUDES AFTER 5/1200Z. THIS WAS ATTRIBUTED TO RECURRING ACTIVE CARRINGTON LONGITUDES. THE M7 X-RAY EVENT AT 5/1827Z WAS LOCATED AT S14W90 AND BORE THE CHARACTERISTICS OF A PROTON EVENT PRODUCER.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE ACTIVE. STORM LEVELS ARE EXPECTED AT HIGH LATITUDES THROUGH THE SECOND DAY (6-7 MAY). THIS IS A COMBINATION OF RECURRING ACTIVE LONGITUDES AND ENHANCEMENT FROM THE 5/1827Z WEST-SOUTH-WEST M7 LIMB EVENT. A PROTON EVENT AT 10 MEV IS EXPECTED TO BEGIN AT SATELLITE ALTITUDES AFTER 5/2200Z AND REACH A MAXIMUM OF 33 P7CM2/SEC/STER AFTER 6/0200Z.

III. EVENT PROBABILITIES 06 MAY-08 MAY

CLASS M 80/80/80

CLASS X 25/25/25

PROTON 45/60/45

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 05 MAY 113

PREDICTED 06 MAY-08 MAY 112/113/116

90 DAY MEAN 05 MAY 130

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 04 MAY 013/016

ESTIMATED AFR/AP 05 MAY 021/025

PREDICTED AFR/AP 06 MAY-08 MAY 020/025-010/015-010/015

SOLTERWARN

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