

HFUS3 BOU 232200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 175

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 23 JUN 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/2100 TO 23/2100Z: SOLAR ACTIVITY WAS LOW. REGION 4520 (S16W01) PRODUCED A C1.0N EVENT AT 23/0530Z. IT GREW TO 200 MILLIONTHS AREA, 21 SPOTS, 8 DEGREES LONGITUDINAL EXTENT, AND A DSO WHITE-LIGHT CLASSIFICATION. IT SUPPORTED ACTIVE DARK FILAMENTS, ARCHED FILAMENTS, DARK SURGES, AND FREQUENT BRIGHT POINTS THROUGHOUT THE PERIOD; WITH SLOWLY INCREASING INTENSITY. INCREASING MAGNETIC GRADIENT WAS APPARENT BY INTERMEDIATE SPOT FORMATION WITH STRONGER VALUES. REGION 4513 PRODUCED A B9/0N EVENT AT 23/0735Z. IT HAD DECREASED TO A SIMPLE ALPHA-TYPE CLASSIFICATION. NO NEW REGION WAS ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW. REGION 4520 PROVIDES A VERY SLIGHT, TO A LATER SLIGHT CHANCE OF MODERATE LEVELS ON THE SECOND-THIRD DAYS (25-26 JUN) DUE TO ITS INCREASINGLY COMPLICATED CONFIGURATION.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 22/2100Z TO 23/2100Z: GEOMAGNETIC ACTIVITY WAS UNSETTLED TO ACTIVE. MINOR-TO-MAJOR STORM LEVELS WERE REPORTED AT HIGH LATITUDES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT ACTIVE TO MINOR STORM LEVELS THROUGHOUT THE FIRST 36 HOURS AS THE EFFECT OF THE DISAPPEARING FILAMENT OF 21 JUN IMPACTS FIELD. MAJOR STORM LEVELS ARE EXPECTED AT HIGH LATITUDES AND BRIEFLY AT MID-LATITUDES DURING NIGHTTIME PERIODS. THE REMAINING ONE-HALF OF THE SECOND DAY THROUGH THE THIRD DAY (25/1200-26/2400Z) IS EXPECTED TO BE AT ACTIVE LEVELS.

III. EVENT PROBABILITIES 24 JUN-26 JUN

CLASS M 05/10/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 JUN 102

PREDICTED 24 JUN-26 JUN 100/099/097

90 DAY MEAN 23 JUN 122

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 JUN 005/011

ESTIMATED AFR/AP 23 JUN 012/010

PREDICTED AFR/AP 24 JUN-26 JUN 025/030-015/020-015/015

SOLTERWARN

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