

HFUS3 BOU 132200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 226

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 13 AUG 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 12/2100 TO 13/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4554 (N08W50) HAD AN ARCHED FILAMENT SYSTEM AND ACTIVE DARK FILAMENT WHICH WEAKENED LATE IN PERIOD. OVERALL DECAY DESCRIBED THIS REGION WHICH STILL PRODUCED NO REAL SIGNIFICANT ACTIVITY. IT RETAINED A WEAK BETA MAGNETIC CONFIGURATION; BUT DECREASED TO A CRO CLASSIFICATION IN WHITE-LIGHT (VICE DSO AT 12/2400Z YESTERDAY'S REGION REPORT). ONE NEW REGION WAS ASSIGNED - 4561 (N06E15) WAS A SIMPLE BETA-TYPE WITH THREE SPOTS, BUT IT SUPPORTED BOTH ARCHED AND ACTIVE DARK FILAMENTS LATE IN THE PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. NO SIGNIFICANT RETURNING REGIONS ARE EXPECTED.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 12/2100Z TO 13/2100Z: GEOMAGNETIC ACTIVITY WAS AT ACTIVE TO UNSETTLED LEVELS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT ACTIVE TO BRIEF MINOR STORM LEVELS. THIS ACTIVITY IS FORECAST DUE TO A COMBINATION OF SEVERAL MINOR DISAPPEARING FILAMENTS, MEDIUM/HIGH SPEED CORONAL HOLE WIND STREAM, AND SOLAR SECTOR BOUNDARY PASSAGE. STORM LEVELS ARE EXPECTED AT HIGH LATITUDES DURING NIGHT-TIME PERIODS WITH POSSIBLE MINOR STORM LEVELS AT MID-LATITUDES NEAR LOCAL MID-NIGHT HOURS. NONE OF THESE FEATURES ARE IDEALLY CONFIGURED TO PRODUCE A STRONG GEOMAGNETIC DISTURBANCE ON THEIR INDIVIDUAL MERIT, AND THE CORONAL HOLE IS A FAIRLY RECENT CHANGE IN BOTH LOCATION AND EXTENT.

III. EVENT PROBABILITIES 14 AUG-16 AUG

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 AUG 084

PREDICTED 14 AUG-16 AUG 082/079/077

90 DAY MEAN 13 AUG 099

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 12 AUG 019/017

ESTIMATED AFR/AP 13 AUG 013/013

PREDICTED AFR/AP 14 AUG-16 AUG 017/015-018/020-018/025

SOLTERWARN

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