

HFUS3 BOU 148200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 349

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 14 DEC 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/2100Z TO 14/2100Z: SOLAR ACTIVITY WAS VERY LOW. REGION 4607 (S11W45) PRODUCED A B1/ON EVENT AT 14/1528Z. IT CONTINUED DECAYING IN WHITE-LIGHT AREA BUT RETAINED ITS EIGHT SPOTS. IT WAS STILL A BETA-TYPE MAGNETICALLY. REGION 4608 (N18E28) REDEVELOPED BOTH RUDIMENTARY PENUMBRAE AND ANOTHER SPOT IN WHITE-LIGHT. IT WAS ALSO A BETA-TYPE. BOTH REGIONS SUPPORTED ACTIVE DARK AND ARCHED FILAMENTS BRIEFLY DURING THE PERIOD. NO NEW REGION WAS ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. RETURNING REGION 4598 (S12, CAR-056) PRODUCED TWO M-LEVEL X-RAY EVENTS AND FOUR IMPORTANCE 1 OPTICAL FLARES DURING THE ITS LAST APPEARANCE. IT IS PREDICTED TO RETURN AT 17/0500Z. THIS REGION PROVIDES THE POTENTIAL FOR SIGNIFICANT ACTIVITY AS IT WAS A ESO WHITE-LIGHT CLASSIFICATION ON THE LAST DAY (2 DEC) OBSERVED AT W83.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 13/2100Z TO 14/2100Z: GEOMAGNETIC ACTIVITY WAS ACTIVE TO UNSETLED. MINOR STORM LEVELS AFFECTED THE HIGH LATITUDES AT 13/2230Z AND 14/1630-1930Z. THE FORECAST CORONAL HOLE STREAM-INDUCED STORM MANIFESTED ITSELF AS THE SINGULAR PULSE AT 13/0600Z AT MID-LATITUDES WITHOUT FURTHER DISTURBANCES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE UNSETLED TO ACTIVE.

III. EVENT PROBABILITIES 15 DEC-17 DEC

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 14 DEC 077

PREDICTED 15 DEC-17 DEC 076/076/077

90 DAY MEAN 14 DEC 075

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 13 DEC 023/024

ESTIMATED AFR/AP 14 DEC 010/015

PREDICTED AFR/AP 15 DEC-17 DEC 014/022-018/022-0.0/022

SOLTERWARN

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