

SDF NUMBER 364

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY. *(AFS)*

ISSUED 2200Z 30 DEC 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 29/2100Z TO 30/2100Z: THE SOLAR ACTIVITY HAS BEEN AT A VERY LOW LEVEL FOR THE PAST 24 HOUR PERIOD. NO NEW REGIONS WERE ASSIGNED.

IB. SOLAR ACTIVITY FORECAST: THE SOLAR ACTIVITY IS EXPECTED TO BE AT A LOW LEVEL OF ACTIVITY THROUGH-OUT THE FORECAST PERIOD. THIS IS DUE TO RETURNING REGIONS 4376/4372 (S14 CAR14/S12 CAR14). THEY PRODUCED A TOTAL OF 4 OPTICAL FLARES AND 3 CLASS "M" X-RAY EVENTS DURING THEIR LAST ROTATION. A VERY SLIGHT CHANCE OF MODERATE LEVEL ACTIVITY IS POSSIBLE. *Same as
29 Dec*

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 29/2100Z TO 30/2100Z: THE GEOMAGNETIC ACTIVITY HAS BEEN AT ACTIVE TO MINOR STORM LEVELS DURING THE PAST 24 HOUR PERIOD. MAJOR STORM LEVELS WERE OBSERVED AT HIGH LATITUDE SITES AFTER 30/0900UT. THIS WAS ATTRIBUTED TO DISAPPEARING FILMENTS ON THE 26/27 DEC 83.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT MINOR STORM TO ACTIVE LEVELS FOR THE FIRST DAY (31DEC), WITH MAJOR STORM LEVELS INDICATED AT HIGH LATITUDE SITES DURING NIGHT-TIME HOURS. THIS IS A CONTINUATION OF THE CURRENT DISAPPEARING FILAMENT DISTURBANCE. THE ACTIVITY IS EXPECTED TO DECREASE TO ACTIVE TO MINOR STORM LEVELS ON THE SECOND AND THIRD DAYS (1/2 JAN) AS THE DISTURBANCE DECREASES.

III. EVENT PROBABILITIES 31 DEC-02 JAN

CLASS M 05/05/05

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 12.7 CM FLUX

OBSERVED 30 DEC 084

PREDICTED 31 DEC-02 JAN 086/088/091

90 DAY MEAN 30 DEC 103

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 29 DEC 012/011

ESTIMATED AFR/AP 30 DEC 031/035

PREDICTED AFR/AP 31 DEC-02 JAN 022/026-015/015-020/025

SOLTERWARN

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