

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 342

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 08 DEC 1983

I A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 07/2100Z TO 08/2100Z: THE SOLAR ACTIVITY HAS BEEN AT A LOW LEVEL FOR THE PAST 24 HOUR PERIOD. REGION 4372 (S13E29) PRODUCED A C2/1B EVENT AT 08/0753UT. THIS REGION DEVELOPED SPOTS IN THE SOUTH-EAST TRAILER AND EVOLVED INTO A WEAK BETA-GAMMA MAGNETIC TYPE. ITS AREA DECREASED TO 162 MILLIONTHS BUT SPOT COUNT CONTINUED TO GROW TO 27. TWO NEW REGIONS WERE ASSIGNED. REGION 4374 (N01E75) WAS A SINGLE SPOT "HSX" WITH 50 MILLIONTHS IN AREA. REGION 4375 (N12W13) WAS A COMPACT "BXO" BETA TYPE WITH ARCHED FILAMENT SYSTEM.

IB. SOLAR ACTIVITY FORECAST: THE SOLAR ACTIVITY IS EXPECTED TO BE AT A LOW LEVEL THROUGH-OUT THE FORECAST PERIOD. REGION 4372 IS EXPECTED TO CONTINUE TO PROVIDE A SLIGHT POSSIBILITY OF MODERATE LEVEL ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 07/2100Z TO 08/2100Z: THE GEOMAGNETIC ACTIVITY HAS BEEN AT MINOR STORM TO ACTIVE LEVELS FOR THE PAST 24 HOUR PERIOD. THIS WAS ATTRIBUTED TO RECURRENCE.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT ACTIVE TO MINOR STORM LEVELS THROUGH-OUT THE FIRST AND SECOND DAY (9/10 DEC) OF THE FORECAST PERIOD. BRIEF PERIODS OF MAJOR STORM LEVEL ACTIVITY IS EXPECTED DURING NIGHT-TIME PERIODS AT HIGH LATITUDES. A DECREASE TO MAINLY ACTIVE LEVELS IS EXPECTED FOR THE THIRD DAY (11 DEC). THIS DISTURBANCE IS ATTRIBUTED TO RECURRENCE. ✓

III. EVENT PROBABILITIES 09 DEC-11 DEC

CLASS M 15/18/05

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 08 DEC 121

PREDICTED 09 DEC-11 DEC 102/099/097

92 DAY MEAN 08 DEC 103

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 07 DEC 028/028

ESTIMATED AFR/AP 08 DEC 015/015

PREDICTED AFR/AP 09 DEC-11 DEC 025/025-025/025-022/020

SOLTERWARN

ANNN