

HFUS3 BOU 242200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 024

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 24 JAN 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/2100 TO 24/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW. REGION 4617 (S10W78) HAS DECAYED CONSIDERABLY IN BOTH SIZE AND MAGNETIC COMPLEXITY. IT REMAINS AN E-TYPE, WITH A SIMPLE BETA MAGNETIC CONFIGURATION. REGION 4618 (N06W28) HAS DECAYED TO A B-TYPE SPOT GROUP. THERE WERE NO NEW REGIONS NUMBERED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE. REGION 4617 STILL HAS THE CAPABILITY TO PRODUCE AN M-LEVEL EVENT.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 23/2100Z TO 24/2100Z: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED, WITH ISOLATED ACTIVE LEVELS, AT ALL LATITUDES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE ACTIVE TO MINOR STORM FOR THE NEXT THREE DAYS. THIS ACTIVITY IS FORECAST BASED ON A CORONAL HOLE WHICH Affected THE FIELD LAST ROTATION. RECENT ICE SATELLITE DATA INDICATES THAT YESTERDAY'S SSC WAS PROBABLY NOT FLARE INDUCED. THE DATA INDICATES FAIRLY LOW SPEED AND HIGH DENSITY SOLAR WIND NEAR THE TIME OF THE SSC. BASED ON SIMILAR X-LEVEL FLARES (AND THEIR SHOCK SPEEDS) IN THE PAST, THE SHOCK INDUCED BY THE RECENT X4 FLARE IS PRESUMED TO HAVE MISSED US.

III. EVENT PROBABILITIES 25 JAN-27 JAN

CLASS M 40/20/10

CLASS X 05/01/01

PROTON 05/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 JAN 081

PREDICTED 25 JAN-27 JAN 077/075/074

90 DAY MEAN 24 JAN 076

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 23 JAN 020/035

ESTIMATED AFR/AP 24 JAN 010/015

PREDICTED AFR/AP 25 JAN-27 JAN 025/035-020/025-020/025

SOLTERWARN

BT