

BT

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 341

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 07 DEC 1983

H.S

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 06/2100Z TO 07/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE THIS PERIOD DUE TO A M2/1B EVENT FROM REGION 4372 (S14E42) AT 0040UT THIS EVENT PRODUCED ONLY MINOR RADIO, 13 FLUX UNITS AT 15400MHZ. REGION 4372 HAS BEEN THE MAJOR PRODUCER OF ACTIVITY DURING THE PAST 24 HOURS HOWEVER THIS REGION HAS NOT HAD A EVENT ABOVE "C" LEVEL SINCE 0600UT. REGION 4372 IS NOW "D" TYPE GROUP OF 200 MILLIONTHS HOWEVER IT REMAINS ONLY A BETA. ALL OTHER REGIONS ON THE VISIBLE DISK ARE SMALL AND HAVE EXHIBITED LITTLE CHANGE DURING THIS PERIOD. NO NEW REGIONS WERE OBSERVED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE GENERALLY LOW WITH ONLY ISOLATED M CLASS ACTIVITY EXPECTED FROM REGION 4372.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 06/2100Z TO 07/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO MINOR STORM, HIGH LATITUDE SITES HAVE HAD PERIODS OF MAJOR STORM, LEVELS DURING THIS PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN AT ACTIVE TO MINOR STORM LEVELS DURING THIS FORECAST PERIOD. SOME PERIODS OF MAJOR STORM ACTIVITY IS EXPECTED AT THE HIGH LATITUDES SITES GENERALLY DURING THE NIGHT TIME SECTORS. A LARGE CORONAL HOLE WHICH WAS LOCATED AT (S30E20) ON 06 DEC AND WAS GENERALLY 15 DEGREES EAST TO WEST AND 25 DEGREES NORTH TO SOUTH HAS CHANGED INTO A NARROW, 10 DEGREE, WIDE HOLE WITH THE SOUTH EAST POINT ON THE LIMB AT SE45 AND THE NORTH WEST POINT AT S12W08. THIS IS AN ABRUPT RAPID CHANGE IN THIS HOLE WHICH MAY INCREASE THE GEOMAGNETIC ACTIVITY ABOVE RECURRENCE LEVELS ON 09DEC TO 11 DEC.

III. EVENT PROBABILITIES 08 DEC-10 DEC

CLASS M 15/15/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 07 DEC 102

PREDICTED 08 DEC-10 DEC 102/101/101

90 DAY MEAN 07 DEC 104

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 06 DEC 022/032

ESTIMATED AFR/AP 07 DEC 020/030

PREDICTED AFR/AP 08 DEC-10 DEC 026/030-030/035-025/025

SOLTERWARN

NNNN

good