

HFUS 3 BOU 162200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 047

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 16 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/2100 TO 16/2100Z: SOLAR ACTIVITY CONTINUED AT A VERY LOW LEVEL THIS PERIOD. ONLY ONE SMALL OPTICAL EVENT WAS OBSERVED A SE AT 16/0715UT FROM REGION 4090 (S18E30), NO X RAYS ABOVE "C" CLASS HAVE BEEN OBSERVED. OF THE FOUR SMALL SPOTTED REGIONS ON THE VISIBLE DISK REGION 4091 (S11E76) IS THE MOST COMPLEX AND IT IS AN "H" TYPE OF 20 MILLIONTHS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT A VERY LOW LEVEL DURING THIS FORECAST PERIOD. CURRENT REGIONS ALONG WITH OLD REGIONS DUE TO RETURN DURING THIS FORECAST PERIOD ARE NOT EXPECTED TO PRODUCE SIGNIFICANT EVENTS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 15/2100Z TO 16/2100Z: THE GEOMAGNETIC FIELD WAS GENERALLY ACTIVE WITH PERIODS OF MINOR TO MAJOR STORM LEVELS. THE MID LATITUDE SITES HAD ONE SHORT PERIOD OF MAJOR STORM LEVEL ACTIVITY FROM 16/0430UT TO 0600UT. THE HIGH LATITUDE SITES WERE AT MINOR STORM LEVELS FROM 16/0430UT TO 1200UT WITH ONE SITE RECORDING MAJOR STORM LEVELS AT 16/1930UT TO CURRENT.

IIB. GEOPHYSICAL ACTIVITY FORECAST: DUE TO THE LACK OF ANY SOLAR DISTURBANCE DURING THE PAST THREE DAYS THE GEOMAGNETIC FIELD IS EXPECTED TO BE AT ACTIVE TO UNSETTLED LEVELS DURING THIS FORECAST PERIOD. THE FIELD WILL TREND TO LOW UNSETTLED AS THE CURRENT EFFECTS OF THE CORONAL HOLE DISAPPEAR.

III. EVENT PROBABILITIES 17 FEB-19 FEB

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 FEB 092

PREDICTED 17 FEB-19 FEB 095/100/105

90 DAY MEAN 16 FEB 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 15 FEB 021/026

ESTIMATED AFR/AP 16 FEB 021/030

PREDICTED AFR/AP 17 FEB-19 FEB 015/015-010/010-015/010

SOLTERWARN

BT