

HFUS 3 BOU 182200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 049

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 18 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/2100 TO 18/2100Z: SOLAR ACTIVITY REMAINS VERY LOW THIS PERIOD. A $\bar{\alpha}$ N CLASS FLARE OPTICALLY WITH LESS THAN C CLASS XRAY OCCURRED IN REGION 4090(S17E13) AT 18/1338Z AND WAS THE LARGEST OF SEVERAL VERY SMALL EVENTS IN THAT REGION. AN ERUPTIVE PROMINENCE AFTER 18/2000Z WAS OBSERVED ON THE EAST LIMB AT S02 AND ACCCOMPANIED A VERY SMALL SLOW RISE TO LESS THAN C CLASS XRAY. REGION 4090 HAS AGAIN APPROXIMATELY DOUBLED IN AREA TO A D CLASS SPOT GROUP OF 70 MILLIONTHS. REGION 4092(S09E65) HAS ALSO INCREASED SIGNIFICANTLY BUT REMAINS AN H CLASS SPOT OF 170 MILLIONTHS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT VERY LOW LEVEL PENDING CONSIDERABLE GROWTH ON THE DISK OR UNANTICIPATED ARRIVALS ON THE EAST LIMB.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 17/2100Z TO 18/2100Z: THE GEOMAGNETIC FIELD BEGAN THE REPORT PERIOD AT ACTIVE LEVEL WITH ISOLATED MIDLATITUDE K INDEX OF 4 OBSERVED. THE TREND HAS BEEN DOWNWARD AND THE FIELD IS CURRENTLY UNSETTLED AND CONTINUING THE DOWNWARD TREND.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED TO LOW UNSETTLED DURING THE FORECAST INTERVAL. NO INFLUENCES TO INDUCE ACTIVITY HAVE BEEN OBSERVED IN THE LAST FEW DAYS SO THAT QUIET LEVELS SHOULD BE APPROACHING AS THE CURRENT TREND CONTINUES.

III. EVENT PROBABILITIES 19 FEB-21 FEB

CLASS M 01/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 FEB 100

PREDICTED 19 FEB-21 FEB 105/112/118

90 DAY MEAN 18 FEB 163

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 17 FEB 016/016

ESTIMATED AFR/AP 18 FEB 012/010

PREDICTED AFR/AP 19 FEB-21 FEB 012/010-010/015-010/015

SOLTERWARN

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