

HFUS 3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 051

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/2100 TO 20/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW. REGION 4090(S15W14) CONTINUES TO DECAY. A NEW REGION OBSERVED TODAY IS 4094(N14E62). IT APPEARS TO BE A SINGLE SPOT. REMAINING REGIONS ARE STABLE SINGLE SPOTS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE VERY LOW. THE FIRST POSSIBILITY FOR AN INCREASE IN THE GENERAL LEVEL OF ACTIVITY MAY DEVELOP WITH THE RETURN OF OLD REGION 4077 AT S18 ON 23 FEB.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 19/2100Z TO 20/2100Z: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE SINCE THE EARLY HOURS OF 20 FEB. THE PROBABLE SOURCE OF DISTURBANCE IS THE SMALL EQUATORIAL CORONAL HOLE WHICH CROSSED CENTRAL MERIDIAN ON ABOUT 17 FEB.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE ACTIVE INTO EARLY HOURS ON 22 FEB. ACTIVITY SHOULD DECREASE RAPIDLY TOWARD QUIET LEVEL BY 23 FEB.

III. EVENT PROBABILITIES 21 FEB-23 FEB

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 FEB 100

PREDICTED 21 FEB-23 FEB 104/108/112

90 DAY MEAN 20 FEB 161

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 FEB 012/012

ESTIMATED AFR/AP 20 FEB 025/025

PREDICTED AFR/AP 21 FEB-23 FEB 018/020-012/015-010/010

SOLTERWARN

BT