

HFUS 3 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 084

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 25 MAR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/2100Z TO 25/2100Z: SOLAR ACTIVITY CONTINUED LOW DURING THIS PERIOD. THE LARGEST X RAY EVENT WAS A C5, NO OPTICAL, AT 25/0238UT. AN ERUPTIVE PROMINENCE OCCURRED AT 25/1416UT FROM SE17 IT EXTENDED OUT TO .51 RADII A WEAK TYPE II SWEEP ALSO WAS RECORDED WITH THIS EVENT. A TYPE II SWEEP WAS ALSO OBSERVED AT 25/0259UT FROM THE SE LIMB. TWO NEW REGIONS WERE NUMBERED TODAY 4126 (S25E09) AND 4127 (S16E86) BOTH REPORTED AS SIMPLE (A) TYPES.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE LOW UNLESS THE ERUPTIVE FROM THE SE INDICATES THAT OLD REGION 4104 (S20 L117) WHICH PRODUCED ONE M CLASS EVENT LAST ROTATION IS RETURNING ACTIVE.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 24/2100Z TO 25/2100Z: THE GEOMAGNETIC FIELD, AT BOTH HIGH AND MID LATITUDES, WAS AT MINOR TO MAJOR STORM LEVELS DURING THE FIRST 18 HOURS OF THIS PERIOD THE FIELD THEN RETURNED TO ACTIVE LEVELS. THE DISTURBANCE IS BELIEVED TO BE THE RESULT OF A FILAMENT WHICH DISAPPEARED ON 20 MARCH AT 1804UT.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE ACTIVE, IN RESPONSE TO THE FILAMENT, UNTIL LATE ON 26 MARCH WHEN THE FIELD IS EXPECTED TO BE UNSETTLED UNTIL LATE ON 28 MARCH WHEN ACTIVE CONDITIONS ARE AGAIN EXPECTED AS THE EFFECTS OF A SMALL CORONAL HOLE ARRIVE AT EARTH.

III. EVENT PROBABILITIES 26 MAR-28 MAR

CLASS M 20/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 MAR 118

PREDICTED 26 MAR-28 MAR 119/120/121

90 DAY MEAN 25 MAR 132

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 24 MAR 010/012

ESTIMATED AFR/AP 25 MAR 045/055

PREDICTED AFR/AP 26 MAR-28 MAR 017/025-010/015-015/015

SOLTERWARN

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