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HFUS 3 BOU 022200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 061

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 02 MAR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 01/2100 TO 02/2100Z: SOLAR ACTIVITY HAS BEEN LOW. A C4/1B FLARE OCCURRED IN REGION 4104(S19E39) ENDING AFTER 01/2100Z. THE MAXIMUM WAS OBSERVED AT 2058Z JUST AT THE END OF THE REPORT PERIOD FOR THE PREVIOUS FORECAST. ALL ACTIVITY SINCE THAT TIME HAS BEEN REPORTED IN REGION 4104 CONSISTING OF C5/0N AT 01/2210Z MAX AND C2/1N AT 01/2315Z MAX AND C3/1N AT 02/0140Z MAX. SEVERAL SMALL SUBFLARES FROM THE REGION HAVE FOLLOWED IN RECENT HOURS. A FILAMENT DISAPANCE WAS REPORTED FROM NEAR N19W25 EARLY ON 02 MARCH. REGIONS 4102(S15E30), 4104 AND NEW REGION TODAY 4105(S09E19) APPEAR TO BE A COUPLED COMPLEX. THE AREA WAS PLACE ENHANCED UNTIL EARLY HOURS OF 02 MARCH. REGION 4104 HAS SLOWED ITS GROWTH BUT LARGE SCALE MAGNETIC RESTRUCTURING APPEARS TO BE TAKING PLACE WITHIN THE AREA OF THE COMPLEX.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW BUT WITH THE POSSIBILITY OF AN ISOLATED M CLASS FLARE FROM THE 4102/4104/4105 REGION COMPLEX.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 01/2100Z TO 02/2100Z: THE GEOMAGNETIC FIELD REACHED MAJOR STORM LEVEL DURING THE PERIOD 02/06-09Z WITH A MID-LATITUDE K-INDEX OF 7 OBSERVED. MAJOR TO MINOR STORM CONDITIONS ARE IN PROGRESS WITH MIDLATITUDE K-INDEXES OF 4 AND 5 BEING OBSERVED.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE AT MAJOR TO MINOR STORM LEVEL THROUGH 4 MARCH AND DECREASING TO ACTIVE TO UNSETTLED BY 5 MARCH.

III. EVENT PROBABILITIES 03 MAR-05 MAR

CLASS M 60/60/60

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 02 MAR 141

PREDICTED 03 MAR-05 MAR 140/140/135

90 DAY MEAN 02 MAR 155

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 01 MAR 017/019

ESTIMATED AFR/AP 02 MAR 051/075

PREDICTED AFR/AP 03 MAR-05 MAR 030/025-020/020-015/020

SOLTERWARN

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