

HFUS 3 BOU 102200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDF NUMBER 041B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200UT 10 FEBRUARY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 10/1200UT TO 10/2200UT: SOLAR ACTIVITY HAS AGAIN DECREASED TO A LOW LEVEL FOR THE 10 HOUR PERIOD. ACTIVITY HAS BEEN RESTRICTED TO LOW LEVEL C-CLASS X-RAY EVENTS WITH NO OPTICAL CORRELATION. REGION 2927 (N05W27) PRODUCED THE ONLY OPTICAL EVENT OBSERVED, A SF FLARE AT 1829UT MAXIMUM. REGION 2930 (N12E03) STILL REMAINS THE MOST SIGNIFICANT DISK REGION BUT HAS BEEN QUIET DURING THE PERIOD. THREE NEW REGIONS HAVE APPEARED AT EAST LIMB AS H-TYPE SPOT GROUPS WHILE NEW REGION 2940 (S08E15) HAS DEVELOPED IN A PREVIOUSLY SPOTLESS PLAGE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD RETURN TO THE MODERATE LEVEL WITH THE EXPECTED OCCURRENCE OF ISOLATED M-CLASS EVENTS FROM REGION 2930.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET SINCE 1200UT. ACTIVITY IS EXPECTED TO INCREASE SOMEWHAT INTO THE UNSETTLED CATEGORY THROUGH THE FORECAST PERIOD AS A RESULT OF A FAVORABLY LOCATED CORONAL HOLE ALONG WITH THE EXPECTED INFLUENCE OF SEVERAL DISAPPEARING FILAMENTS.

III. EVENT PROBABILITIES 11 FEBRUARY - 13 FEBRUARY

CLASS M 70/70/70

CLASS X 10/10/10

PROTON 10/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 FEBRUARY 190

PREDICTED 11-13 FEBRUARY 180/176/170

90-DAY MEAN 10 FEBRUARY 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 09 FEBRUARY 21/23

ESTIMATED AFR/AP 10 FEBRUARY 05/07

PREDICTED AFR/AP 11-13 FEBRUARY 10/14 - 14/18 - 14/14

SOLTERWARN

BT