

HFUS 1 BOU 181300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 049A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 18 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/1200Z TO 18/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3607(N05W10) PRODUCED AN M1/1B AT 172145Z (MAX) WITH SMALL DISCRETE FREQUENCY BURSTS. REGION 3610(N12E33) PRODUCED AN M1/2B AT 180904Z (MAX) WITH MEDIUM SIZE DISCRETE FREQUENCY BURSTS (210 FLUX UNITS AT 10 CM). REGION 3607 APPEARS TO HAVE STABILIZED IN DEVELOPMENT AS IT MAINTAINS ITS POTENTIAL FOR ENERGETIC ACTIVITY. REGION 3610 ON THE OTHER HAND IS GROWING AND BECOMING MORE DYNAMIC. ITS BETA GAMMA DELTA SPOT GROUP IS POSSIBLY DEVELOPING IN THE CENTRAL PORTIONS AS FLUCTUATIONS ARE OCCURRING FREQUENTLY IN THAT AREA. NONE OF THE OTHER DISK FEATURES APPEAR THREATENING AT THIS TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE MODERATE WITH ALTERNATE PRODUCTION FROM 3607 AND 3610.

PART II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO MINOR STORM LEVELS. ACTIVE CONDITIONS SHOULD PERSIST FOR THE NEXT 24 HOURS.

III. EVENT PROBABILITIES 19 FEB-21 FEB

CLASS M 80/80/80

CLASS X 05/05/05

PROTON 02/02/02

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 FEB 167

ESTIMATED 18 FEB 170

PREDICTED 19 FEB-21 FEB 169/170/170

90 DAY MEAN 17 FEB 200

V. GEOMAGNETIC A INDICES

OBSERVED AFR 16 FEB 005 AP 17 FEB 022

ESTIMATED AFR 17 FEB 028 AFR/AP 18 FEB 021/025

PREDICTED AFR/AP 19 FEB-21 FEB 015/025-012/015-012/018

SOLTERWARN

BT

HXUS BOU 181300

PREDM 08019 08020 08021

PREDX 00519 00520 00521

PREDP 00219 00220 00221

PCAF 00119

TENCM 16919 17020 17021

AFRED 01519 01220 01221

AFAPF 02519 01520 01821

KKK 23343 33223 33332

BT

HFUS 3 BOU 182200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 049B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 18 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/1200Z TO 18/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 9 HOURS. AN M3/1B FLARE OCCURRED IN REGION 3607 (N04W17), WHICH MAXED AT 1323Z. MINOR RADIO BURSTS WERE OBSERVED IN ASSOCIATION WITH THIS EVENT, INCLUDING 870 FLUX UNITS AT 245 MHZ. REGION 3610 (N12E29) HAS SHOWN SIGNIFICANT GROWTH TODAY AND HAS APPARENTLY MAINTAINED ITS MAGNETIC COMPLEXITY. A STRONG ARCH FILAMENT SYSTEM IS NOW IN PROGRESS THERE. REGION 3609 (N13W17) HAS DECAYED TO A SMALL B-TYPE GROUP. NEW REGION 3611 (S17W99) WAS NUMBERED BEYOND THE WEST LIMB IN RESPONSE TO A SPRAY OUT TO .3 RADII REPORTED NEAR 1530Z. A SMALL, BRIGHT PLAGE HAD BEGUN TO FORM ON WEST LIMB YESTERDAY AT THAT LOCATION. NEW REGION 3612 (S23W01), A C-TYPE GROUP, HAS EMERGED ON THE DISK.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE WITH REGIONS 3610 AND 3607 BOTH CAPABLE OF PROVIDING SIGNIFICANT FLARES.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE DURING THE PAST 9 HOURS, BUT THE TREND IS TOWARD QUIETER LEVELS. THE FIELD IS EXPECTED TO BE UNSETTLED TO OCCASIONALLY ACTIVE DURING THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 19 FEB-21 FEB

CLASS M 80/80/80

CLASS X 05/05/05

PROTON 02/02/02

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 FEB 170

PREDICTED 19 FEB-21 FEB 169/170/170

90 DAY MEAN 18 FEB 200

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 17 FEB 026/022

ESTIMATED AFR/AP 18 FEB 018/024

PREDICTED AFR/AP 19 FEB-21 FEB 015/015-012/015-012/018

SOLTERWARN

BT

HXUS BOU 182200

PREDM 08019 08020 08021

PREDX 00519 00520 00521

PREDP 00219 00220 00221

PCAFT 00119

TENCM 16919 17020 17021

AFRED 01519 01220 01221

AFAPF 01519 01520 01821

BT