

HXUS 1 BOU 111300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 070A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 11 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 10/1200Z TO 11/1200Z: SOLAR ACTIVITY WAS AT LOW LEVELS DURING THIS PERIOD. THE LARGEST FLARE OF THE DAY WAS A C5/1B EVENT AT 10/1849Z FROM REGION 3635 (S10W41). THIS EVENT WAS ACCCOMPANIED BY TYPE II AND TYPE IV RADIO BURST SIGNATURES. A BRIGHT SURGE ON THE WEST LIMB (N12) WAS OBSERVED FROM 11/0616 TO 0652Z, EXTENDING OUT TO 0.24 SOLAR RADII, BUT NO XRAY FLUXES ACCOMPANIED THIS EVENT. THE LARGEST REGION NOW ON THE SOLAR DISK IS REGION 3634 (N06W01) WITH AN AREA OF 500 MILLIONTHS, BUT THIS REGION IS MAGNETICALLY SIMPLE, AS ARE THE REST OF THE REGIONS.

IB. SOLAR ACTIVITY FORECAST: WE EXPECT SOLAR ACTIVITY TO CONTINUE AT LOW LEVELS. NO REGION ON THE SOLAR DISK APPEARS CAPABLE OF PRODUCING M-CLASS FLARE ACTIVITY. FREQUENT C-CLASS SUBFLARES, HOWEVER, CAN BE EXPECTED TO OCCUR DURING THE NEXT 3 DAYS.

III. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS BRIEFLY AT ACTIVE LEVELS FROM 0300 TO 0700Z. OTHERWISE, QUIET CONDITIONS HAVE PREVAILED. ACTIVE CONDITIONS ARE FORECAST FOR 12-13 MARCH, IN RESPONSE TO A CORONAL HOLE PASSAGE.

III. EVENT PROBABILITIES 12 MAR-14 MAR

CLASS M 40/30/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 MAR 184

ESTIMATED 11 MAR 175

PREDICTED 12 MAR-14 MAR 170/165/160

90 DAY MEAN 10 MAR 196

V. GEOMAGNETIC A INDICES

OBSERVED AFR 09 MAR 016 AP 10 MAR 016

ESTIMATED AFR 10 MAR 012 AFR/AP 11 MAR 015/012

PREDICTED AFR/AP 12 MAR-14 MAR 020/025-018/020-015/018

SOLTERWARN

BT

HXUS BOU 111300

PREDM 04012 03013 02014

PREDX 00112 00113 00114

PREDP 00112 00113 00114

PCAF 00112

TENCM 17012 16513 16014

AFRED 02012 01813 01514

AFAPF 02512 02013 01814

KKK 22254 43334 44433

BT

AFAPP 03012 02513 02014

BT

HXUS 3 BOU 112200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 070B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 11 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 11/1200Z TO 11/2100Z: SOLAR ACTIVITY CONTINUES LOW. TWO SMALL NEW REGIONS HAVE ROTATED INTO VIEW AND HAVE BEEN NUMBERED 3643 (S03E69) AND 3644 (N06E74). A NEW SMALL REGION IS EMERGING AT N24E06. OTHER DISK REGIONS HAVE SHOWN EITHER VERY LITTLE CHANGE OR SLOW DECAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE LOW FOR THE NEXT THREE DAYS. THERE IS ONLY A SLIGHT PROBABILITY OF CLASS M FLARES BEING PRODUCED BY CURRENT DISK REGIONS. NO SIGNIFICANT ACTIVE REGIONS ARE EXPECTED TO RETURN DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. ACTIVE CONDITIONS ARE EXPECTED TO BEGIN NEAR MIDDAY ON 12 MARCH AND CONTINUE THROUGH 14 MARCH. A LARGE CORONAL HOLE IN THE SOUTHWEST QUADRANT, ROOTED IN NEGATIVE FIELDS AND APPROXIMATELY 60 DEGREES IN LONGITUDINAL EXTENT, IS THE RATIONAL FOR THIS FORECAST.

III. EVENT PROBABILITIES 12 MAR-14 MAR

CLASS M 20/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 11 MAR 181

PREDICTED 12 MAR-14 MAR 176/170/167

90 DAY MEAN 11 MAR 195

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 10 MAR 013/016

ESTIMATED AFR/AP 11 MAR 011/012

PREDICTED AFR/AP 12 MAR-14 MAR 020/030-018/025-015/020

SOLTERWARN

BT

HXUS BOU 112200

PREDM 02012 02013 02014

PREDX 00112 00113 00114

PREDP 00112 00113 00114

PCAFT 00112

TENCM 17612 17013 16714

AFRED 02012 01813 01514

AFAPP 03012 02513 02014

BT