

HFXUS 1 BOU 131300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 286A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 13 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 12/1200Z TO 13/1200Z: SOLAR ACTIVITY REMAINS LOW. REGION 3938 (N23W39) APPEARS TO HAVE NEARLY PEAKED AND HAS SIMPLIFIED BACK TO A BIPOLE MAGNETIC CONFIGURATION. REGION 3948 (N07E15) CONTINUED RAPID GROWTH THROUGH MOST OF THE DAY BUT THIS TREND SEEMS TO BE SLOWING AT ISSUE TIME. 3948 HAS PRODUCED SEVERAL SUBFLARES AND INTERIOR SPOTS HAVE EMERGED. A MODERATE SIZE H SPOT ROTATED ONTO THE DISK AT S08E73 AND WAS NUMBERED 3950. WHILE EMERGING NEAR WHERE TWO REGIONS WERE LAST ROTATION, 3950 APPEARS TO BE A NEW REGION. NONE OF THE MANY OTHER REGIONS ON THE DISK ARE DISPLAYING SIGNIFICANT CHANGES.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE LOW. REGIONS 3938 AND 3948 WILL LIKELY CONTINUE TO SUBFLARE. LARGER EVENTS FROM THESE REGIONS ARE APPARENTLY BECOMING LESS PROBABLE, BUT TOMORROW'S DATA SHOULD ALLOW A MORE DEFINITIVE DETERMINATION. NO SIGNIFICANT ACTIVE REGIONS ARE EXPECTED AT THE EAST LIMB DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE BUT THIS DISTURBANCE DOES NOT EXHIBIT THE SOLAR WIND PARAMETERS CHARACTERISTIC OF FILAMENT ERUPTIONS. THE FIELD IS EXPECTED TO CONTINUE ACTIVE THROUGHOUT THE FORECAST PERIOD WITH THE MORE SEVERE DISRUPTION BEGINNING ON 15 OCT RELATING TO A CORONAL HOLE HIGH SPEED SOLAR WIND STREAM. AS WITH MOST CORONAL HOLE RELATED DISTURBANCES, LARGE K VALUES ARE NOT INDICATED BUT NEAR CONTINUOUS K INDICES OF APPROXIMATELY FOUR ARE EXPECTED.

III. EVENT PROBABILITIES 14 OCT-16 OCT

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 OCT 137

ESTIMATED 13 OCT 140

PREDICTED 14 OCT-16 OCT 143/145/147

90 DAY MEAN 12 OCT 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR 11 OCT 013 AP 12 OCT 013

ESTIMATED AFR 12 OCT 012 AFR/AP 13 OCT 018/030

PREDICTED AFR/AP 14 OCT-16 OCT 015/025-020/015-020/015

SOLTERWARN

BT

HFXUS BOU 131300

PREDM 01014 01015 01016

PREDX 00114 00115 00116

PREDP 00114 00115 00116

PCAF 00114

TENCM 14314 14515 14716

AFRED 01514 02015 02016

AFAPF 02514 01515 01516

KKK 34354 43334 44332

BT

XBOU

HFUS 3 BOU 132200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SFC NUMBER 286

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 13 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FPO

13/1200Z TO 13/2100Z : 13/1200Z TO 13/2100Z :

SOLAR ACTIVITY HAS BEEN LOW THIS PERIOD. THE STRONGEST OPTICAL FLARE WAS A SUB-NORMAL IN REGION 3949 (NO3W09), WHILE THE STRONGEST FLARE IN XRAY WAS A C 0.9/SUB FAINT IN REGION 3942 (NO7E07). REGIONS

3949 AND 3946 (S10W21) HAVE HAD SMALL ARCHED FILAMENT SYSTEMS THIS PERIOD. PRIOR TO 0200 Z REGION 3950 (S07E55) HAD A RAPID INCREASE IN WHITE LIGHT AREA, BUT THIS MAY ALL BE APPARENT DUE TO ROTATION AWAY FROM THE EAST LIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW THROUGHOUT THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE DURING THIS PERIOD. THE FIELD IS EXPECTED TO REMAIN IN THE ACTIVE CATEGORY THROUGHOUT THE FORECAST. A SLIGHT DECREASE FROM THE CURRENT LEVEL IS EXPECTED ON THE 14TH, FOLLOWED BY AN INCREASE ON THE 15TH AND 16TH DUE TO CORONAL HOLE ACTIVITY.

III. EVENT PROBABILITIES 14 OCT-16 OCT

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 OCT 145

PREDICTED 14 OCT-16 OCT 150/154/155

90 DAY MEAN 13 OCT 164

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 12 OCT 013/013

ESTIMATED AFR/AP 13 OCT 020/024

PREDICTED AFR/AP 14 OCT-16 OCT 015/020-020/020-020/020

SOLTERWAR N

BT