

HFUS 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 BIPOLAR 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

HXUS BOU 131300

PREDM 01014 01015 01016
PREDX 00114 00115 00116
PREDP 00114 00115 00116
PCAFT 00114
TENCM 14314 14515 14716
AFRED 01514 02015 02016
AFAPF 02514 01515 01516
KKK 34354 43334 44332

BT

KBOU
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 FROM
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 (N03W09), WHILE THE
STRONGEST FLARE IN XRAY WAS A C 0.9/SUB FAINT IN REGION 3948
(N07E07). REGIONS

3949 AND 3946 (S10W21) HAVE HAD SMALL ARCHED FILAMENT SYSTEMS
THIS PERIOD. PRIOR TO 0200Z REGION 3950 (S07E65) HAD A RAPID
INCREASE IN WHITE LIGHT AREA, BUT THIS MAY ALL BE APPARENT DUE
TO ROTATION AWAY FROM THE EAST LIMB.

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 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