

HFUS 1 BOU 301300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 303A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 30 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
29/1200Z TO 30/1200Z: SOLAR ACTIVITY CONTINUES LOW. REGION 3960
(N13W38) PRODUCED TWO LONG-LIVED 1B FLARES ON THE 29TH, A C5/1B
AT 29/1409Z MAXIMUM, AND A C4/1B AT 29/1715Z MAXIMUM. THESE
FLARES, WHICH WERE THE LARGEST OBSERVED SINCE 27 OCT, DISPLAYED
AN XRAY SIGNATURE CHARACTERISTIC OF FILAMENT ACTIVATION. SINCE
THESE FLARES THIS REGION HAS STABILIZED WITH ONLY MINOR FILAMENT
ACTIVITY. IN WHITE LIGHT IT IS A SMALL, SLOWLY DECLINING D-TYPE
SPOT GROUP. REGION 3955 (S11W72) CONTINUED TO PRODUCE SMALL
SUBFLARES DURING ITS DECAY PHASE. REGION 3961 (S06W33), THE
ONLY MAGNETICALLY COMPLEX GROUP ON THE DISK YESTERDAY, HAS
UNDERGONE TRAILER SPOT FRAGMENTATION WITH THE RESULTING LOSS OF
ITS DELTA CONFIGURATION. LITTLE FLARE ACTIVITY HAS BEEN
REPORTED HERE. REGION 3966 (N07W07) REMAINED DORMANT UNTIL
RECENT HOURS, WHEN EMERGING FLUX AND A SMALL ARCH FILAMENT
SYSTEM HAS BEEN OBSERVED ALONG WITH SMALL SUBFLARES. NEW
EMERGING REGION 3969 (S10E04) HAS BEEN NUMBERED TODAY. IT IS A
RAPIDLY GROWING B-TYPE GROUP. NO ACTIVITY HAS BEEN OBSERVED AT
THE EAST LIMB.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
PREDOMINATELY LOW, WITH ONLY A SLIGHT CHANCE OF ISOLATED
M-CLASS ACTIVITY FROM REGIONS 3960 AND 3961.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN AT ACTIVE TO MINOR STORM LEVELS DURING THE PAST 24 HOURS.
OCCASIONAL MINOR STORM CONDITIONS ARE EXPECTED FOR THE
REMAINDER OF TODAY, FOLLOWED BY ACTIVE LEVELS FOR THE NEXT 48
HOURS. CONDITIONS ON THE 1ST OF NOVEMBER SHOULD BE DISTURBED
DUE TO YESTERDAYS FILAMENT RELATED FLARE ACTIVITY. THE LAST DAY
OF THE FORECAST PERIOD SHOULD SEE LEVELS RETURN TO NEAR
UNSETTLED.

III. EVENT PROBABILITIES 31 OCT-02 NOV

CLASS M 40/30/20
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 OCT 177
ESTIMATED 30 OCT 169
PREDICTED 31 OCT-02 NOV 160/154/148
90 DAY MEAN 29 OCT 166

V. GEOMAGNETIC A INDICES

OBSERVED AFR 28 OCT 010 AP 29 OCT 039
ESTIMATED AFR 29 OCT 033 AFR/AP 30 OCT 025/025
PREDICTED AFR/AP 31 OCT-02 NOV 020/020-025/025-015/020

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HXUS BOU 301300
PREDM 04031 03001 02002
PREDX 00131 00101 00102
PREDP 00131 00101 00102
PCAFT 00131
TENCM 16031 15401 14802
AFRED 02031 02501 01502
AFAPF 02031 02501 02002
KKK 43344 33333 45443
BT

HFUS 3 BOU 302200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 303B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 30 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
30/1200Z TO 30/2100Z: SOLAR ACTIVITY HAS BEEN LOW. GROWTH OF
REGION 3966(N07W12) NOW MAKES THIS THE MOST SIGNIFICANT REGION
ON THE SOLAR DISK. THE SMALL AND SLIGHTLY COMPLEX CLASS D SPOT
GROUP HAS NUMEROUS SPOTS AND A FORM SUGGESTIVE OF FURTHER
SIGNIFICANT GROWTH. THIS REGION HAS FORMED WITHIN THE REMNANT
FIELDS OF THE VERY PERSISTENT ACTIVITY COMPLEX WHICH DOMINATED
SOLAR ACTIVITY FOR MOST OF 1982. MINOR GROWTH HAS CONTINUED IN
REGION 3963(N12W84). AN ACTIVE FILAMENT HAS AGAIN FORMED IN
REGION 3960(N11W45) DIRECTLY OVER AN AREA OF STEEP
MAGNETIC-FIELD GRADIENT. THE DELTA CONFIGURATION IN REGION
3961(S06W39) HAS BROKEN DOWN, BUT THE MAGNETIC CONFIGURATION IN
ITS LOCATION REMAINS COMPLEX. THIS LARGE SUNSPOT GROUP IS
SIMPLE ON A LARGER SCALE AND THE ASSOCIATED ACTIVITY HAS BEEN
CORRESPONDINGLY LOW. REGION 3969(S09W01) IS VERY SMALL AND
SHOWING NO SIGNIFICANT GROWTH. A WEAK SOURCE OF RADIO EMISSION
HAS APPEARED AT EAST LIMB, PRESUMABLY FROM A MINOR ACTIVITY
COMPLEX DUE AT NE LIMB.

IB. SOLAR ACTIVITY FORECAST: ACTIVITY THIS FORECAST PERIOD WILL
DECREASE MARKEDLY UNLESS REGION 3966 CONTINUES SIGNIFICANT
GROWTH. WITH CONTINUED GROWTH CLASS M EVENTS WOULD BE LIKELY
ON THE SECOND AND THIRD DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: GEOMAGNETIC ACTIVITY
CONTINUED ACTIVE WITH A TREND TO LOWER INTENSITY. ACTIVE TO
MINOR STORM CONDITIONS ARE EXPECTED FOR THE NEXT 48 HOURS DUE
TO FLARE AND CORONAL ACTIVITY TWO DAYS AGO. A PERIOD OF
UNSETTLED ACTIVITY WILL END THIS FORECAST INTERVAL.

III. EVENT PROBABILITIES 31 OCT-02 NOV

CLASS M	40/30/20
CLASS X	01/01/01
PROTON	01/01/01
PCAF	GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	30 OCT	169
PREDICTED	31 OCT-02 NOV	164/158/153
90 DAY MEAN	30 OCT	166

V. GEOMAGNETIC A INDICES

OBSERVED	AFR/AP 29 OCT	028/039
ESTIMATED	AFR/AP 30 OCT	028/030
PREDICTED	AFR/AP 31 OCT-02 NOV	020/020-025/025-015/020

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