

HFUS 1 BOU 291300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 302A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 29 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
28/1200Z TO 29/1200Z: SOLAR ACTIVITY HAS REMAINED LOW FOR THE
PERIOD. THE LARGEST EVENT OBSERVED WAS A C2/1N FLARE FROM
REGION 3960 (N13W26) AT 0125Z MAXIMUM. MINOR SUBFLARES WERE
ALSO REPORTED FROM REGIONS 3955 (S11W58), 3961 (S06W18) AND
3963 (N13W61). ALL OF THESE REGIONS HAVE EITHER STABILIZED OR
DECAYED SLOWLY DURING THE PAST 24 HOURS. REGION 3961 POSSESSES
THE MOST MAGNETIC COMPLEXITY OF ALL THE DISK REGIONS WITH A
WEAK DELTA CONFIGURATION IN ITS NORTHERN TRAILER SPOTS, BUT
THIS AREA HAS ONLY MANAGED MINOR PLAGE FLUCTUATIONS. REGION
3960 CONTAINS AN ACTIVE NEUTRAL LINE FILAMENT WHICH WAS MOST
ACTIVE JUST PRIOR TO THIS MORNINGS IN FLARE, BUT IN WHITE LIGHT
THIS REGION IS DISPLAYING SLOW DECAY. REGION 3966 (N08E05) IS
NOW THE ONLY GROUP SHOWING ANY GROWTH DURING THE PERIOD,
INCREASING FROM A SPOTLESS PLAGE YESTERDAY TO A SMALL B-TYPE
REGION TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
GENERALLY LOW, HOWEVER, ISOLATED M-CLASS XRAY EVENTS ARE
POSSIBLE FROM REGIONS 3961, 3960 AND 3955. AS TIME PROGRESSES
THROUGH THE FORECAST PERIOD THE PROBABILITY FOR M-EVENTS WILL
DECREASE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS
UNSETTLED TO SLIGHTLY ACTIVE THROUGH MOST OF THE PERIOD UNTIL
29/05Z WHEN A MINOR GEOMAGNETIC STORM BEGAN ABRUPTLY. THE
STORMS PRELIMINARY CHARACTERISTICS INDICATE IT IS THE RESULT OF
THE FILAMENT DISAPPEARANCE ON THE 25TH (HIGH SOLAR WIND
DENSITY). ACTIVE TO MINOR STORM LEVELS ARE EXPECTED FOR THE
REMAINDER OF THE DAY AND AGAIN ON THE 30TH IN RESPONSE TO THE
M3 FLARE ON THE 27TH. THE FIELD SHOULD THEN RETURN TO UNSETTLED
LEVELS BY THE 1ST OF NOV.

III. EVENT PROBABILITIES 30 OCT-01 NOV

CLASS M 50/40/30

CLASS X 05/01/01

PROTON 05/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 OCT 184

ESTIMATED 29 OCT 173

PREDICTED 30 OCT-01 NOV 166/156/150

90 DAY MEAN 28 OCT 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR 27 OCT 013 AP 28 OCT 010

ESTIMATED AFR 28 OCT 012 AFR/AP 29 OCT 028/035

PREDICTED AFR/AP 30 OCT-01 NOV 030/030-020/020-012/015

SOLTERWARN

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HXUS BOU 291300

PREDM 05030 04031 03001

PREDX 00530 00131 00101

PREDP 00530 00131 00101

PCAFT 00130

TENCM 16630 15631 15001

AFRED 03030 02031 01201

AFAPF 03030 02031 01501

KKK 43355 43334 54433

BT

HFUS 3 BOU 292200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 302B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 29 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
29/1200Z TO 29/2100Z: SOLAR ACTIVITY HAS BEEN LOW. LONG-LIVED
CLASS C5 EVENTS AT 1409Z AND 1715Z (MAX) HAVE BEEN ASSOCIATED
WITH REGION 3960(N13W31). THIS REGION CONTINUES TO POSSESS A
HIGH MAGNETIC FIELD GRADIENT AND DISTORTED MAGNETIC FIELD
CONFIGURATION, BUT WITH SMALL AND DIMINISHING SUNSPOTS. ACTIVE
FILAMENT AND/OR LARGE-SCALE FIELD DISRUPTION MAY HAVE BEEN
ASSOCIATED WITH THESE FLARES AS EVIDENCED BY THE GRADUAL RISE
AND FALL BEHAVIOR OF X-RAYS AND THE RICH RADIO EMISSIONS. MINOR
RE-GROWTH IS REPORTED IN REGION 3963(N12W70), LEADING IT TO
INTERACT MORE STRONGLY WITH NEARBY REGION 3959(N14W57). THE
ASSOCIATED SUNSPOTS REMAIN VERY SMALL. A SMALL DELTA
CONFIGURATION CONTINUES IN REGION 3961(S06W26). ITS LARGE,
SIMPLE SPOT GROUP IS SLOWLY DECLINING. ALL OTHER REGIONS ARE
SMALL AND ALSO DECLINING.

IB. SOLAR ACTIVITY FORECAST: A DECREASING CHANCE OF CLASS M
ACTIVITY COMES FROM ANY OF FOUR REGIONS IN THE WESTERN PART OF
THE SOLAR DISK. NO IMPORTANT ACTIVITY IS EXPECTED AT EAST LIMB
IN THE NEXT THREE DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE MINOR GEOMAGNETIC
STORM CONTINUED UNABATED DURING THIS PERIOD. AN INCREASE IN
ACTIVITY IS EXPECTED IN THE NEXT 12 HOURS AS A RESULT OF FLARE
ACTIVITY ON 27 OCTOBER. ANOTHER INCREASE IS EXPECTED ON 01
NOVEMBER FROM TODAY'S ACTIVITY.

III. EVENT PROBABILITIES 30 OCT-01 NOV

CLASS M 50/40/30

CLASS X 05/01/01

PROTON 05/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 OCT 177

PREDICTED 30 OCT-01 NOV 166/156/150

90 DAY MEAN 29 OCT 166

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 28 OCT 010/010

ESTIMATED AFR/AP 29 OCT 033/035

PREDICTED AFR/AP 30 OCT-01 NOV 030/030-020/020-025/025

SOLTERWARN

BT