

HFUS 1 BOU 221300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 295A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 22 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
21/1200Z TO 22/1200Z: THOUGH SOLAR ACTIVITY REMAINS LOW, SEVERAL
MID TO UPPER LEVEL CLASS C X-RAY BURSTS HAVE OCCURRED. THE
LARGEST OF THESE WAS A C8/1B AT 2248Z ON THE SOUTHEAST LIMB. NO
STRUCTURE WAS EVIDENT AT THE TIME OF THE FLARE; SINCE THEN,
SOME SPOTS AND BRIGHT PLAGE ARE BEGINNING TO ROTATE ON TO THE
DISK. THIS IS REGION 3961 (S06E90). THE CONTINUED GROWTH IN
REGION 3955 (S10E36) HAS CREATED A DELTA AND A HIGHLY
CONVOLUTED NEUTRAL LINE ACROSS THE SOUTHERN PORTION OF THE LEAD
PENUMBRA. THOUGH RELATIVELY QUIET, THIS DEVELOPMENT ADDS TO
THE POTENTIAL FOR ENERGETIC FLARES FROM REGION 3955. REGIONS
3958 (N10W15) AND 3960 (N13E65) HAVE CONTRIBUTED MINOR FLARE
ACTIVITY AND BOTH THESE REGIONS ARE EXPECTED TO CONTINUE AT
THIS LEVEL. A SEGMENTED FILAMENT, EXTENDING OVER 30 DEGREES
ACROSS THE SOUTH CENTRAL PORTION OF THE DISK, DISSIPATED
BETWEEN 1500-2000Z ON 21 OCTOBER.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
BECOME MODERATE WITH REGIONS 3955 AND 3961 BEGINNING TO PRODUCE
ENERGETIC FLARES.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN UNSETTLED WITH PERIODS AT A QUIET LEVEL. THESE CONDITIONS
ARE EXPECTED TO TRANSIT TO ACTIVE AND THEN STORM LEVEL WITHIN
THE NEXT 36 HOURS. STORM CONDITIONS ARE EXPECTED 24-25 OCTOBER
DUE TO THE FILAMENTS WHICH DISAPPEARED ON 20 AND 21 OCTOBER.

III. EVENT PROBABILITIES 23 OCT-25 OCT

CLASS M 60/70/70

CLASS X 05/05/05

PROTON 01/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 OCT 163

ESTIMATED 22 OCT 178

PREDICTED 23 OCT-25 OCT 190/200/203

90 DAY MEAN 21 OCT 158

V. GEOMAGNETIC A INDICES

OBSERVED AFR 20 OCT 016 AP 21 OCT 009

ESTIMATED AFR 21 OCT 008 AFR/AP 22 OCT 008/015

PREDICTED AFR/AP 23 OCT-25 OCT 020/020-035/040-035/030

SOLTERWARN

BT

HXUS BOU 221300

PREDM 06023 07024 07025

PREDX 00523 00524 00525

PREDP 00123 00524 00525

PCAFT 00123

TENCM 19023 20024 20825

AFRED 02023 03524 03525

AFAPF 02023 04024 03025

KKK 12233 33344 55554

BT

NNNNCVZGVZLVZOUU

KBOU

HFUS 3 BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 295B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 22 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/1200Z TO 22/2100Z: SOLAR ACTIVITY HAS BEEN LOW WITH ONLY SMALL SUBFLARES REPORTED SINCE 1200Z. REGION 3955 (S10E32) IS RESTRUCTURING AND NOW CONTAINS TWO DELTA CONFIGURATIONS IN THE SPOT GROUP. IT APPEARS CAPABLE OF MODERATE FLARE ACTIVITY ALTHOUGH IT HAS BEEN QUIET THE PAST 24 HOURS. REGION 3961 (S07E70), WHICH PRODUCED A C8/1P LIMB FLARE YESTERDAY 21 OCT 2248Z, HAS ROTATED ONTO THE DISK WITH A SMALL SIMPLE SPOT GROUP AND HAS NOT BEEN ACTIVE TODAY. REGION 3960 (N12E69) CONTINUES TO PRODUCE MINOR FLARE ACTIVITY. ALL OTHER REGIONS ARE STABLE AND QUIET.

IB. SOLAR ACTIVITY FORECAST: MODERATE SOLAR ACTIVITY IS EXPECTED DURING THE NEXT THREE DAYS FROM REGION 3955 IF IT CONTINUES TO DEVELOP.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED AND SHOULD REMAIN UNSETTLED BUT BECOME ACTIVE LATE ON 23 OCT. MINOR STORM LEVEL CONDITIONS ARE EXPECTED ON 24 AND 25 OCT FROM FILAMENT DISAPPEARANCES ON 20 AND 21 OCT.

III. EVENT PROBABILITIES 23 OCT-25 OCT

CLASS M 60/70/70

CLASS X 05/05/05

PROTON 01/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 OCT 170

PREDICTED 23 OCT-25 OCT 182/192/200

90 DAY MEAN 22 OCT 159

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 21 OCT 009/009

ESTIMATED AFR/AP 22 OCT 003/015

PREDICTED AFR/AP 23 OCT-25 OCT 020/020-035/040-035/030

SOLTERWAR N

ET

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