

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 190/200/208  
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

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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

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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 C8/1F 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 (N10E69) 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

BT

NNNNSV

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