

HFUS 1 BOU 161300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 289A  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1300Z 16 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 15/1200Z TO 16/1200Z: SOLAR ACTIVITY IS LOW. REGION 3950 (S09E33) APPEARS TO BE THE MOST LIKELY CANDIDATE FOR ANY SIGNIFICANT ACTIVITY BUT IT TOO IS RATHER UNIMPRESSIVE. HOWEVER, IT HAS DEVELOPED SOME SATELLITE SPOTS, IS THE LARGEST REGION ON THE VISIBLE DISK AND IS PRODUCING OCCASIONAL SUBFLARES. REGION 3949 (N03W43) WHICH GREW RAPIDLY YESTERDAY IS NOW DECAYING. THE OTHER DISK REGIONS ARE SIMPLE AND STABLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE LOW BUT AN ISOLATED M EVENT IS POSSIBLE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED. THE FIELD SHOULD BE UNDER THE INFLUENCE OF A CORONAL HOLE DURING THIS PERIOD RESULTING IN UNSETTLED TO ACTIVE CONDITIONS.

III. EVENT PROBABILITIES 17 OCT-19 OCT

CLASS M 10/10/10

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 15 OCT 135

ESTIMATED 16 OCT 134

PREDICTED 17 OCT-19 OCT 130/128/128

90 DAY MEAN 15 OCT 161

V. GEOMAGNETIC A INDICES

OBSERVED AFR 14 OCT 021 AP 15 OCT 009

ESTIMATED AFR 15 OCT 007 AFR/AP 16 OCT 010/015

PREDICTED AFR/AP 17 OCT-19 OCT 015/015-015/015-015/020

SOLTERWARN

BT

HXUS BOU 161300  
PREDM 01017 01018 01019  
PREDX 00117 00118 00119  
PREDP 00117 00118 00119  
PCAFT 00117  
TENCM 13017 12818 12819  
AFRED 01517 01518 01519  
AFAPF 01517 01518 02019  
KKK 23243 32233 34332  
BT

NNNNCVZGVZLVZOZSV  
NNNNCVZGVZLVZOZUU

KBO U

HF US 3 BOU 162200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 289B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 16 OCT 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 16/1200Z TO 16/2100Z: SOLAR ACTIVITY REMAINED LOW DURING THE PERIOD. ONLY MINOR C-CLASS XRAY EVENTS WERE OBSERVED, THE LARGEST A C2/SN FLARE FROM REGION 3950 (S07E26) AT 1631Z MAXIMUM. THIS REGION IS NOW THE ONLY SIGNIFICANT GROUP ON THE DISK. IT HAS DEVELOPED A SMALL PENUMRA ON ONE OF ITS SATELLITE SPOTS, AND HAS DISPLAYED PLAGE FLUCTUATIONS IN THIS AREA ALL DAY. IT IS ALSO IN THIS AREA WHERE THE STRONGEST MAGNETIC GRADIENT EXISTS. THE REMAINING DISK REGIONS HAVE SHOWN LITTLE CHANGE EXCEPT FOR REGION 3938 (N22W83) WHICH IS DECAYING RAPIDLY AS IT NEARS WEST LIMB. NO NEW REGIONS WERE NUMBERED TODAY, AND THE EAST LIMB HAS BEEN QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY WILL REMAIN LOW. THE PRESENT DISK REGIONS DO NOT HAVE THE CAPABILITY OF A LARGE EVENT. A GENERAL INCREASE IN SOLAR PARAMETERS IS EXPECTED ON THE THIRD DAY (10.7CM SOLAR RADIO FLUX AND SUNSPOT NUMBER) WHEN SEVERAL PRIOR ACTIVE REGIONS SHOULD BEGIN THEIR EAST LIMB ROTATION.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD BECAME ACTIVE EARLY IN THE PERIOD. SOLAR WIND MEASUREMENTS BY THE ISEE-3 SPACECRAFT INDICATE A SLIGHT INCREASE IN THE WINDS VELOCITY, POSSIBLY CORRELATING TO THE FAVORABLY LOCATED CORONAL HOLE. THESE ACTIVE CONDITIONS ARE EXPECTED TO PERSIST THROUGH THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 17 OCT-19 OCT

CLASS M 10/10/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 16 OCT 131

PREDICTED 17 OCT-19 OCT 130/128/132

90 DAY MEAN 16 OCT 160

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 15 OCT 006/009

ESTIMATED AFR/AP 16 OCT 015/015

PREDICTED AFR/AP 17 OCT-19 OCT 015/015-015/015-015/020

SOLTERWAR N

BT