

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

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NNN

KBO U

HFUS 3 BOU 162200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SF 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 PENUMBRA 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 A 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