

HFUS 1 BOU 131300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 013A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 13 JAN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
12/1200Z TO 13/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION
3545 (S18W76) REALIZED ITS POTENTIAL AND PRODUCED AN M1/1B
FLARE WHICH MAXED AT 0139 Z. MINOR RADIO NOISE WAS REPORTED
ACROSS THE SPECTRUM BUT INCLUDED AN IMPORTANCE 2 TYPE II SWEEP
(14 MIN DURATION) AND AN IMPORTANCE 1 TYPE IV STORM (92 MIN
DURATION). REGION 3549 (S08E47) APPEARS TO BE DEVELOPING
RAPIDLY AND IS EXHIBITING PLAGE FLUCTUATIONS, BRIGHT POINTS,
AND AN ARCH FLAMENT SYSTEM. THERE ARE ONLY THREE OTHER SMALL
SPOTS VISIBLE ON THE DISK AT THIS TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
LOW ALTHOUGH REGION 3545 COULD PRODUCE ANOTHER SIGNIFICANT
EVENT BEFORE ITS WEST LIMB PASSAGE ON 14 JANUARY. REGION 3549
SHOULD BE MONITORED FOR FURTHER DEVELOPMENT AND THERE IS THE
POSSIBILITY OF THE EAST LIMB RETURN OF SEVERAL REGIONS OVER THE
NEXT THREE DAYS WHICH WERE REASONABLY HEALTHY UPON THEIR WEST
LIMB TRANSIT.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN QUIET FOR THE PAST 24 HOURS. DURING A DATA GAP BETWEEN
0020 AND 0530Z, THE ISEE-3 INTERPLANETARY SPACECRAFT REGISTERED
AN ENHANCEMENT IN SOLAR WIND DENSITY, VELOCITY AND TOTAL
MAGNETIC FIELD. HOWEVER THE INTERPLANETARY FIELD IS POINTING
MOSTLY NORTHWARD AT THIS TIME. THE GEOMAGNETIC FIELD IS
EXPECTED TO REMAIN AT OR NEAR QUIET LEVELS FOR THE NEXT TWO
DAYS WITH AN INCREASED PROBABILITY FOR UNSETTLED CONDITIONS ON
THE THIRD DAY IN RESPONSE TO TODAY'S FLARE AND AN INFERRED
CORONAL HOLE IN THE SOUTHERN SOLAR HEMISPHERE.

III. EVENT PROBABILITIES 14 JAN-16 JAN

CLASS M 20/20/20
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	12 JAN	137
ESTIMATED	13 JAN	134
PREDICTED	14 JAN-16 JAN	130/130/135
90 DAY MEAN	12 JAN	207

V. GEOMAGNETIC A INDICES

OBSERVED AFR	11 JAN	006	AP 12 JAN	003
ESTIMATED AFR	12 JAN	003	AFR/AP 13 JAN	005/008
PREDICTED AFR/AP	14 JAN-16 JAN	008/008-008/008-010/008		

SOLTERWARN

BT

HXUS BOU 131300
PREDM 02014 02015 02016
PREDX 00114 00115 00116
PREDP 00114 00115 00116
PCAFT 00114
TENCM 13014 13015 13516
AFRED 00814 00815 01016
AFAPF 00814 00815 00816
KKK 21232 22222 23222
BT

HFUS 3 BOU 132200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 013B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 13 JAN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
13/1200Z TO 13/2100Z: SOLAR ACTIVITY DECREASED TO THE LOW LEVEL
FOLLOWING THE M1/1B FLARE IN REGION 3545 (S17W80) AT 13/0139Z.
MINOR SURGING HAS BEEN OBSERVED FROM THIS REGION AS IT BEGINS
ITS WEST LIMB TRANSIT. REGION 3549 (S08E40) IS NOW THE DOMINANT
DISK REGION OF THE FOUR SPOTTED GROUPS VISIBLE. RAPID GROWTH
CONTINUES IN THIS D TYPE GROUP WITH SUBFLARE ACTIVITY
INCREASING. THE EAST LIMB IS QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN LOW.
DEVELOPMENT IN REGION 3549 COULD RESULT IN AN ISOLATED M-CLASS
EVENT DURING THE NEXT THREE DAYS. THE EXPECTED RETURN OF
SEVERAL ACTIVE REGIONS DURING THE PERIOD SHOULD CAUSE THE SOLAR
PARAMETERS (SUNSPOT NUMBER AND 10.7 CM FLUX) TO GRADUALLY
INCREASE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN QUIET. UNSETTLED CONDITIONS ARE EXPECTED UNTIL 16 JAN,
WHEN ACTIVE CONDITIONS ARE POSSIBLE AS A RESULT OF TODAY'S M1
FLARE.

III. EVENT PROBABILITIES 14 JAN-16 JAN

CLASS M 20/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 JAN 132

PREDICTED 14 JAN-16 JAN 128/130/135

90 DAY MEAN 13 JAN 206

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 12 JAN 002/003

ESTIMATED AFR/AP 13 JAN 005/008

PREDICTED AFR/AP 14 JAN-16 JAN 008/007-008/008-015/015

SOLTERWARN

BT

HXUS BOU 132200

PREDM 02014 02015 02016

PREDX 00114 00115 00116

PREDP 00114 00115 00116

PCAFT 00114

TENCM 12814 13015 13516

AFRED 00814 00815 01516

AFAPF 00714 00815 01516

BT