

HFUS 1 BOU 181300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 138A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 18 MAY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/1200Z TO 18/1200Z: SOLAR ACTIVITY HAS BEEN LOW. REGION 3740(N23E58) PRODUCED THE LARGEST FLARE A C4/1F AT 17/2317Z. REGION 3740 IS A D CLASS SPOT GROUP SHOWING SOME MAGNETIC COMPLEXITY AND AN AREA OF NEAR 300 MILLIONTHS. REGION 3741(N24E71) IS AN H TYPE SPOT SHARING THE SAME NEUTRAL LINE AND SHOWING SYMPATHETIC ACTIVITY WITH REGION 3740. STILL ANOTHER REGION MAY BE FOLLOWING REGION 3741 CLOSELY CONSIDERING THE SURGING OBSERVED ON THE LIMB BEHIND REGION 3741. REMAINING REGIONS APPEAR STABLE AND HAVE NOT CONTRIBUTED TO RECENT ACTIVITY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN GENERALLY LOW. SOME INCREASE IN FREQUENCY OF ACTIVITY MAY OCCUR AS EASTERN REGIONS MOVE MORE FULLY ONTO THE DISK. MAJOR ACTIVITY IS STILL NOT VERY LIKELY UNTIL MORE REGION DEVELOPMENT IS OBSERVED.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED UNTIL RECENT HOURS. MINOR STORM LEVEL HAS BEEN REACHED AND WILL PERSIST AT LEAST BRIEFLY BEGINNING IN THE 09 TO 12Z REPORT PERIOD. ACTIVE LEVELS ARE EXPECTED FOR THE BALANCE OF 18 MAY AND ACTIVE TO UNSETTLED LEVELS THROUGH THE REST OF THE FORECAST PERIOD. A DISAPPEARING FILAMENT ON 17 MAY CAN BE A POSSIBLE SOURCE OF ACTIVITY FOR LATE ON 20 TO 21 MAY.

III. EVENT PROBABILITIES 19 MAY-21 MAY

CLASS M 20/25/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 MAY 142

ESTIMATED 18 MAY 147

PREDICTED 19 MAY-21 MAY 151/155/159

90 DAY MEAN 17 MAY 178

V. GEOMAGNETIC A INDICES

OBSERVED AFR 16 MAY 014 AP 17 MAY 012

ESTIMATED AFR 17 MAY 013 AFR/AP 18 MAY 026/020

PREDICTED AFR/AP 19 MAY-21 MAY 014/018-015/015-015/020

SOLTERWARN

BT

HFUS 3 BOU 182200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 138F

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 18 MAY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
18/1200Z TO 18/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE DURING
THE PAST NINE HOURS WITH THE OCCURRENCE OF AN M4/1B FLARE IN
REGION 3740 (N22E50) AT 1221Z MAXIMUM. THIS FLARE WAS
ACCOMPANIED BY MODERATE DISCRETE FREQUENCY RADIO BURSTS (120
FLUX UNITS AT 2695MHZ) AND STRONG SHORT WAVE FADES TO 13MHZ.
THIS FLARE ENDED A PERIOD OF ALMOST A WEEK OF LOW ACTIVITY.
REGION 3740 HAS SHOWN NO DEFINITE SIGNS OF GROWTH OR DECAY, BUT
CONTINUES TO MAINTAIN ITS MAGNETIC COMPLEXITY. CLOSELY
FOLLOWING THIS REGION IS 3741 (N24E63) WHICH HAS DISPLAYED SOME
MINOR SYMPATHETIC FLARING. NEW REGION 3743 (N24E71) IS YET
ANOTHER REGION EXTENDING ITS PLAGE BACK TO THE EAST LIMB. THIS
REGION APPEARS SIMPLE IN WHITE LIGHT. THE REMAINING DISK
REGIONS ARE EITHER SIMPLE OR DECLINING.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
REMAIN GENERALLY LOW, HOWEVER, AN ISOLATED M-CLASS EVENT IS
POSSIBLE FROM THE NORTHEAST COMPLEX.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE FOLLOWING THE BRIEF MINOR STORM CONDITIONS.
OBSERVED BETWEEN 09-12Z. UNSETTLED TO OCCASIONALLY ACTIVE
LEVELS ARE EXPECTED DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES 19 MAY-21 MAY

CLASS M 30/35/40
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 MAY 143
PREDICTED 19 MAY-21 MAY 148/154/157
90 DAY MEAN 18 MAY 178

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 17 MAY 013/012
ESTIMATED AFR/AP 18 MAY 022/020
PREDICTED AFR/AP 19 MAY-21 MAY 014/018-015/015-015/020
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HXUS BOU 182200

PREDM 03019 03520 04021
PREDX 00119 00120 00121
PREDP 00119 00120 00121
PCAFT 00119
TENCM 14819 15420 15721
AFRED 01419 01520 01521
AFAPF 01819 01520 02021

BT