

HFUS 1 BOU 191300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 139A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 19 MAY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/1200Z TO 19/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE WITH AN M4/1B FLARE OCCURING IN REGION 3740(N22E43) AT 18/1221Z MAX. REMAINING ACTIVITY HAS CONSISTED OF C CLASS XRAY AND SUBFLARE OPTICAL EVENTS FROM REGIONS 3740, 3741(N24E56), 3742(S12E50), AND 3733(S12W32). REGION 3740 HAS GROWN SIGNIFICANTLY IN WHITE LIGHT AND HAS MAINTAINED NEAR FLARE-BRIGHT PLAGE CONTINUOUSLY IN RECENT HOURS. THE REGION EXHIBITS SOME MAGNETIC COMPLEXITY BUT IS YET TO BECOME AN IMPRESSIVE LOOKING REGION. REMAINING REGIONS APPEAR STABLE OR DECLINING.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE MOSTLY LOW WITH MODERATE CONDITIONS POSSIBLE IN CASE OF ENERGETIC FLARING FROM THE NORTHEASTERN COMPLEX OF REGIONS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. ACTIVE TO NEAR ACTIVE LEVELS ARE EXPECTED TO CONTINUE FOR MUCH OF THE FORECAST PERIOD. ACTIVITY IS THOUGHT DUE TO CORONAL HOLE INFLUENCE FROM AN EQUATORIAL CORONAL HOLE TRANSIT OF CENTRAL MERIDIAN ON 14-15 MAY. A DISAPPEARING FILAMENT ON 17 MAY IS ALSO A POSSIBLE CONTRIBUTOR TO ACTIVITY IN THE PERIOD.

III. EVENT PROBABILITIES 20 MAY-22 MAY

CLASS M 35/40/40

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 MAY 143

ESTIMATED 19 MAY 146

PREDICTED 20 MAY-22 MAY 150/153/153

90 DAY MEAN 18 MAY 178

V. GEOMAGNETIC A INDICES

OBSERVED AFR 17 MAY 013 AP 18 MAY 022

ESTIMATED AFR 18 MAY 022 AFR/AP 19 MAY 014/018

PREDICTED AFR/AP 20 MAY-22 MAY 015/015-015/020-012/015

SOLTERWARN

BT

HFUS 3 BOU 192200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 139B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 19 MAY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
19/1200Z TO 19/2100Z: SOLAR ACTIVITY CONTINUES LOW. REGION 3740
(N21E35) HAS BEEN THE MOST PRODUCTIVE REGION ON THE DISK,
PRODUCING MOST OF THE C-CLASS X-RAY EVENTS OBSERVED. THE
LARGEST WAS A LONG LASTING C4/SB AT 1317Z MAXIMUM. THIS REGION
CONTINUES TO GROW AND DEVELOP IN MAGNETIC COMPLEXITY. ALMOST
ALL OF TODAY'S EVENTS HAVE OCCURRED IN THE CENTRAL PORTION OF
THE REGION. TWO NEW SPOTTED REGIONS WERE NUMBERED TODAY, REGION
3744 (S08W23) AND 3745 (N17E13). BOTH ARE SIMPLE A-TYPE GROUPS.
NEW REGION 3746 (S16E18) IS A SPOTLESS PLAGE, BUT PRODUCED A
C1/SF FLARE AT 0235Z MAXIMUM. THE REMAINING DISK REGIONS ARE
QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
REMAIN LOW, HOWEVER, REGION 3740 IS LIKELY TO PRODUCE A SMALL
M-CLASS EVENT DURING THE NEXT 3 DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE. UNSETTLED TO ACTIVE CONDITIONS ARE EXPECTED TO
PERSIST THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 20 MAY-22 MAY

CLASS M 35/40/40

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 MAY 152

PREDICTED 20 MAY-22 MAY 155/157/160

90 DAY MEAN 19 MAY 178

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 18 MAY 019/022

ESTIMATED AFR/AP 19 MAY 015/016

PREDICTED AFR/AP 20 MAY-22 MAY 015/015-015/020-012/015

SOLTERWARN

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HXUS BOU 192200

PREDM 03520 04021 04022

PREDX 00120 00121 00122

PREDP 00120 00121 00122

PCAFT 00120

TENCM 15520 15721 16022

AFRED 01520 01521 01222

AFAPF 01520 02021 01522

BT