

HFUS 1 BOU 091300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 190A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 09 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
08/1200Z TO 09/1200Z: SOLAR ACTIVITY HAS BEEN HIGH THIS PERIOD.
REGION 3804 (N12E73) HAS PRODUCED X9 (0742Z MAX) AND X1 (0904Z
MAX) X-RAY FLARES. IT ALSO PRODUCED 1B, 2B, AND TWO 3B OPTICAL
FLARES. RADIO EMISSIONS WERE ENHANCED BY THE FLARE ACTIVITY,
INCLUDING WEAK TYPE II AND TYPE IV RADIO EMISSIONS. NO OTHER
REGION ON THE DISK APPEARS CAPABLE OF SIGNIFICANT ACTIVITY. NO
NEW REGIONS HAVE BEEN NUMBERED THIS PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE
HIGH THROUGHOUT THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN UNSETTLED AND SHOULD CONTINUE UNSETTLED THROUGH 10 JULY.
JULY 11 AND 12 THE FIELD IS EXPECTED TO INCREASE TO ACTIVE
CONDITIONS. ONLY SLIGHT PROTON ENHANCEMENT IS EXPECTED FROM THE
X9/3B FLARE AND SHOULD OCCUR IN THE NEXT 24 HOURS.

III. EVENT PROBABILITIES 10 JUL-12 JUL

CLASS M 90/90/90

CLASS X 70/70/70

PROTON 10/15/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 08 JUL 140

ESTIMATED 09 JUL 160

PREDICTED 10 JUL-12 JUL 170/175/180

90 DAY MEAN 08 JUL 156

V. GEOMAGNETIC A INDICES

OBSERVED AFR 07 JUL 021 AP 08 JUL 019

ESTIMATED AFR 08 JUL 014 AFR/AP 09 JUL 014/018

PREDICTED AFR/AP 10 JUL-12 JUL 010/015-016/020-016/025

SOLTERWARN

BT

HFUS 3 BOU 092200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 190B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 09 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 09/1200Z TO 09/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE SINCE 1200Z AS REGION 3804 (N13E69) CONTINUES TO PRODUCE FREQUENT SUB AND M-CLASS FLARES. THE LARGEST FLARES WERE AN M1/SB AT 1616UT, AN M1/SB AT 1338UT AND AN M9/1B AT 2106UT. THE M9 EVENT WAS ACCOMPANIED BY A MAJOR RADIO BURST ON ALL FREQUENCIES WITH 400FU AT 2695MHZ AND 33000FU AT 245MHZ. THE REGION CONTAINS A LARGE COMPLEX SPOT GROUP WITH A MAGNETIC DELTA CONFIGURATION. THERE IS ALSO EVIDENCE OF ANOTHER REGION BEHIND REGION 3804 AND STILL BEYOND THE LIMB. THREE NEW REGIONS WERE NUMBERED TODAY. REGION 3805 (S10W29) DEVELOPED ON THE DISK AND IS GROWING RAPIDLY ALTHOUGH IT IS STILL RELATIVELY SMALL. REGION 3806 (S22E52) WHICH IS VERY SMALL. REGION 3807 (S07E82) IS VERY NEAR THE LIMB WITH A BRIGHT PLAGE AND SINGLE LARGE SPOT VISIBLE. THIS REGION HAS PRODUCED THREE SMALL SUBFLARES SINCE 1600Z.

IB. SOLAR ACTIVITY FORECAST: HIGH SOLAR ACTIVITY IS EXPECTED FROM REGION 3804 DURING ITS DISK PASSAGE AND MODERATE ACTIVITY IS POSSIBLE IN REGION 3807 IN THE NEXT THREE DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. ACTIVE CONDITIONS ARE EXPECTED 11-12 JULY FROM THE X9/3B FLARE 09/0728UT. NO PROTON ENHANCEMENTS HAVE BEEN OBSERVED FROM THIS FLARE.

III. EVENT PROBABILITIES 10 JUL-12 JUL

CLASS M 90/90/90

CLASS X 70/70/70

PROTON 10/15/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 09 JUL 165

PREDICTED 10 JUL-12 JUL 175/183/186

90 DAY MEAN 09 JUL 156

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 08 JUL 016/019

ESTIMATED AFR/AP 09 JUL 014/018

PREDICTED AFR/AP 10 JUL-12 JUL 010/015-016/020-016/025

SOLTERWARN

BT

HXUS BOU 092200

PREDM 09010 09011 09012

PREDX 07010 07011 07012

PREDP 01010 01511 02012

PCAFT 00210

TENCM 17510 18311 18612

AFRED 01010 01611 01612

AFAPF 01510 02011 02512

BT