

HFUS 1 BOU 031300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 154A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1300Z 03 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
02/1200Z TO 03/1200Z: SOLAR ACTIVITY HAS BEEN VERY HIGH. REGION  
3763 (S09E72) PRODUCED AN X8/2B WHITE LIGHT FLARE AT 03/1141Z  
ACCOMPANIED BY TYPE II, IV AND A CASTELLI U SHAPED RADIO BURST  
WITH 98000 FU AT 245 MHZ AND 2700 FU AT 2595 MHZ. SHORT WAVE  
FADES OF UP TO 22 MHZ WERE ALSO REPORTED. EARLIER THIS REGION  
PRODUCED AN M9/1B FLARE AT 02/1525Z WITH TYPE II AND IV RADIO  
EMISSION AND A RADIO BURST OF 240 FU AT 2695 MHZ. AN M1/SB AT  
03/0317Z AND AN M2/1E AT 0318Z PLUS NUMEROUS SMALLER FLARES  
HAVE ALSO BEEN REPORTED IN THIS REGION DURING THE DAY. THE SPOT  
GROUP IN 3763 CONTAINS A MAGNETIC DELTA CONFIGURATION BUT IS  
STILL TOO CLOSE TO THE EAST LIMB FOR A GOOD ANALYSIS. TYPE II  
AND IV RADIO EMISSION WAS REPORTED AT 03/0409Z FROM ABOVE THE  
NORTHWEST LIMB AND APPEARS TO BE FROM REGION 3739 WHICH ROTATED  
BEYOND WEST LIMB 4 DAYS AGO. ALL OTHER REGIONS ARE INACTIVE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO  
REMAIN AT MODERATE TO HIGH LEVELS THROUGH 15 JUNE AS REGION  
3763 CROSSES THE DISK AND OLD REGION 3739 RETURNS ON 11 JUNE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN UNSETTLED AND IS EXPECTED TO BE QUIET TO UNSETTLED DURING  
THE FORECAST PERIOD. UNSETTLED TO ACTIVE CONDITIONS ARE  
POSSIBLE BEGINNING 6 JUNE FROM THE X8 FLARE AT 03/1141Z AND  
FUTURE FLARE ACTIVITY. A PARTICLE ENHANCEMENT IS ALSO POSSIBLE  
BEGINNING EARLY ON 4 JUNE FROM THIS EVENT.

III. EVENT PROBABILITIES 04 JUN-06 JUN

CLASS M - 95/95/95

CLASS X - 30/30/30

PROTON 20/20/20

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 02 JUN 131

ESTIMATED 03 JUN 135

PREDICTED 04 JUN-06 JUN 140/142/144

90 DAY MEAN 02 JUN 170

V. GEOMAGNETIC A INDICES

OBSERVED AFR 01 JUN 025 AP 02 JUN 022

ESTIMATED AFR 02 JUN 015 AFR/AP 03 JUN 010/010

PREDICTED AFR/AP 04 JUN-06 JUN 003/010-003/010-003/010

SOLTERWARN

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HFUS 3 BOU 032200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 154B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY,  
ISSUED 2200Z 03 JUN 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
03/1200Z TO 03/2100Z: SINCE 1200, SOLAR ACTIVITY HAS BEEN AT  
MODERATE LEVELS. REGION 3763 (S08E62) HAS BEEN THE ONLY ACTIVE  
REGION ON THE DISK, PRODUCING SEVERAL C-CLASS AND ONE M-CLASS  
XRAY EVENTS. THE LARGEST EVENT, AN M2/SB,  
PEAKED AT 15 5UT AND WAS ACCOMPANIED BY SHORT WAVE FADES  
THROUGH 16 MHZ AND REPORTS OF LOOPS ABOVE THE REGION.  
MICROWAVE EMISSIONS, HOWEVER, HAVE BEEN WEAK WITH ALL OF THE  
EVENTS. ALL OTHER REGIONS ON THE DISK HAVE BEEN RELATIVELY  
QUIET. A NEW REGION, 3765 (S03W05), HAS APPEARED DURING THE  
PERIOD.

IB. SOLAR ACTIVITY FORECAST: REGION 3763 IS EXTREMELY COMPLEX  
MAGNETICALLY. MAGNETIC DELTAS ARE PRESENT IN BOTH THE LEADER  
AND INTERMEDIATE SPOTS. ADDITIONALLY, THE REGION IS GENERALLY  
ORIENTED IN A NORTH-SOUTH DIRECTION, SUGGESTING THAT A  
CONSIDERABLE AMOUNT OF POTENTIAL ENERGY MAY BE STORED IN THE  
FIELDS ABOVE THE REGION. THEREFORE, THE REGION IS CLEARLY  
CAPABLE OF PRODUCING ENERGETIC FLARES AND PROTON EMISSIONS OVER  
THE NEXT FEW DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN AT UNSETTLED LEVELS DURING THE DAY. A SLIGHT NEAR EARTH  
PARTICLE ENHANCEMENT IS EXPECTED EARLY ON 4 JUN AS THE RESULT  
OF THE X3/2B FLARE WHICH OCCURRED IN REGION 3763 AT 1146UT ON 3  
JUN. PARTICLES FROM THIS EVENT MAY PRODUCE UNSETTLED TO ACTIVE  
CONDITIONS IN THE GEOMAGNETIC FIELD OVER THE NEXT SEVERAL DAYS.

III. EVENT PROBABILITIES 04 JUN-06 JUN

CLASS M 95/95/95

CLASS X 60/60/60

PROTON 25/30/35

PCAF RED

IV. OTTAWA 10.7 CM FLUX

OBSERVED 03 JUN 138

PREDICTED 04 JUN-06 JUN 141/144/147

90 DAY MEAN 03 JUN 168

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 02 JUN 021/022

ESTIMATED AFR/AP 03 JUN 013 /010

PREDICTED AFR/AP 04 JUN-06 JUN 015/010-015/010-015/015

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