

HFUS 1 BOU 021400

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 092A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY-

ISSUED 1200UT 02 APRIL 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 01/1200UT  
TO 02/1200UT:

SOLAR ACTIVITY HAS BEEN MODERATE TO HIGH. AN M4 XRAY BURST,  
PRESUMABLY FROM BEHIND THE WEST LIMB, WAS OBSERVED FROM 01/1405Z  
UNTIL 01/1539Z. AFTER THAT TIME ACTIVITY WAS RESTRICTED TO THE  
SUBFLARE CATEGORY UNTIL 02/1059Z WHEN AN X2/1B BEGAN IN REGION  
2999 (S43W67). THIS EVENT WAS ACCOMPANIED BY SHORTWAVE FADES TO  
22 .MHZ, SMALL RADIO BURST (60 FLUX UNITS ON 2695 MHZ) AND THEN  
RETURNED TO HALF POWER AT 1107Z. REGION 2999 HAS NOT SHOWN MUCH  
CHANGE IN THE PAST 24 HOURS HAVING RETAINED ALL OF ITS FLARE  
PRODUCING CHARACTERISTICS. REGION 3012 (N13E09) IS SHOWING  
INDICATIONS OF BECOMING COMPLEX AND COULD BE A POTENTIAL CLASS M  
PRODUCER IN THE NEXT DAY OR SO. NONE OF THE OTHER DISK FEATURES  
HAVE CHANGED MUCH AND DO NOT APPEAR THREATENING AT PRESENT.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD CONTINUE AT ITS CURRENT LEVEL UNTIL DEPARTURE  
OF 2999 IN ABOUT TWO DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD WAS QUIET TO UNSETTLED EXCEPT FOR A BRIEF  
PERIOD OF MINOR STORM CONDITIONS BETWEEN 15Z AND 18Z ON 1 APR.  
THE FIELD IS EXPECTED TO RESPOND DURING THE NEXT THREE DAYS TO  
RECENT FLARE-ACTIVITY AND TO THE DISAPPEARANCE OF A FILAMENT  
ON 1 APRIL. A SLIGHT PROTON ENHANCEMENT CONTINUES TO BE OBSERVED  
AND THESE CONDITIONS ARE LIKELY TO PERSIST AND POSSIBLY INCREASE  
DURING THE NEXT 24 HOURS.

III. EVENT PROBABILITIES 03-05 APRIL

CLASS M 55/60/65

CLASS X 35/35/20

PROTON 35/35/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 01 APR 228

ESTIMATED 02 APR 228

PREDICTED 03-05 APR 230/230/235

90-DAY MEAN 01 APR 195

V. GEOMAGNETIC A INDICES

OBSERVED AFR 31 MAR 17 AP 01 APR 23

ESTIMATED AFR 1001 APR 19 AFR/AP 02 APR 12/15

PREDICTED AFR/AP 03-05 APR 18/20 - 40/30 - 25/25

SOLTERWARN

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HFUS 3 BOU-022200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 092B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 02 APRIL 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

02/1200UT TO 02/2200UT:

SOLAR ACTIVITY HAS BEEN MODERATE. AN M1 X-RAY EVENT MAXING AT 1710UT WAS ACCOMPANIED BY AN ERUPTIVE PROMINENCE ON THE LIMB OUT TO 0.3 SOLAR RADII FROM REGION 2999 (S42W74). THIS REGION FLARED AGAIN AT 1926UT, PRODUCING A C7/2B EVENT. ANOTHER LARGE FILAMENT HAS DISAPPEARED. THE FILAMENT WAS LAST OBSERVED IN BOULDER ON 1 APRIL AT S65 EXTENDING FROM E30 DEGRESS TO W20 DEGRESS. NEW REGION 3025 (N09E66) WAS NUMBERED TODAY. IT IS AN H-TYPE SPOT.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN AT MODERATE TO HIGH LEVELS BASED ON FLARE POTENTIAL CONTAINED IN 2999.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED FOR THE PAST 10 HOURS. THE SLIGHT PROTON ENHANCEMENT HAS CONTINUED TO DECLINE. GEOMAGNETIC ACTIVITY IS EXPECTED TO INCREASE TOMORROW AND REACH STORM LEVELS ON 04 APRIL.

III. EVENT PROBABILITIES: 03 APRIL - 05 APRIL

CLASS M 55/60/65

CLASS X 35/35/20

PROTON 35/35/20

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 02 APRIL 213

PREDICTED 03-05 APRIL 220/220/225

90 DAY MEAN 02 APRIL 195

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 01 APRIL 21/23

ESTIMATED AFR/AP 02 APRIL 08/10

PREDICTED AFR/AP 03-05 APRIL 18/20 40/30 25/25

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