

HFUS 1 BOU 301400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 089A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 30 MARCH 1981

I A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

29/1200UT TO 30/1200UT:

SOLAR ACTIVITY HAS BEEN MODERATE. AN M3/2N EVENT OCCURRED IN REGION 2993 (N14W75), MAXIMUM AT 30/0054Z. 460 FLUX UNITS OF 2695 MHZ RADIO NOISE ACCCOMPANIED THE EVENT, AND POST FLARE LOOPS WERE OBSERVED TO .14 SR. REGION 2993 HAS SHOWN FURTHER DECLINE AND THE LATEST EVENT MAINTAINING M LEVEL XRAY FOR MORE THAN THREE HOURS, MAY HAVE ENDED ITS SIGNIFICANCE. CURRENTLY 16 SPOTTED REGIONS ARE VISIBLE ON THE SOLAR DISK. REGION 2999 (S43W32) APPEARS THE MOST COMPLEX, WITH THE GREATEST PROBABILITY FOR SIGNIFICANT ACTIVITY.

I B. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY MAY BE EXPECTED TO REMAIN AT MODERATE LEVELS, PRIMARILY DUE TO REGION 2999. SEVERAL REGIONS 2993, 3001 (N21W26), 3009 (N25E44), AND 3011 (S04E57) ARE ALSO LIKELY TO PRODUCE LESS ENERGETIC ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN INTERMITTENTLY ACTIVE. MOSTLY UNSETLED CONDITIONS TO NEAR ACTIVE LEVELS ARE LIKELY THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 31 MAR - 02 APRIL

CLASS M 60/60/60

CLASS X 02/02/02

PROTON 02/02/02

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 29 MAR 215

ESTIMATED 30 MAR 215

PREDICTED 31 MAR-02 APR 212/210/210

90 DAY MEAN 29 MAR 194

V. GEOMAGNETIC A INDICES

OBSERVED AFR 28 MAR 14 AP 29 MAR 19

ESTIMATED AFR 29 MAR 15 AFR/AP 30 MAR 12/15

PREDICTED AFR/AP 31 MAR-02 APR 15/20 15/20 16/15

SOLTERWARN

BT

HFUS 3 BOU 302200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 0898

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200UT 30 MARCH 1981

I A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
30/1200UT TO 30/2200UT:

SOLAR ACTIVITY HAS BEEN LOW WITH ONLY C CLASS EVENTS REPORTED  
SINCE 1200 UT. REGION 2999 (S42W39) REMAINS COMPLEX AND IS GROWING  
SLIGHTLY. THERE ARE CURRENTLY 20 SPOT GROUPS VISIBLE. SIX  
SMALL NEW GROUPS WERE NUMBERED TODAY. REGIONS 3014 (N15E32), 3015  
(S07W58), 3016 (N19W13), 3018 (S22W02), 3019 (N17E77).

B. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN AT MODERATE LEVELS. PRIMARILY  
DUE TO REGION 2999.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN INTERMITTENTLY ACTIVE. UNSETTLED  
TO NEAR ACTIVE CONDITIONS ARE EXPECTED DURING THE FORECAST PERIOD.  
A SMALL PARTICLE EVENT BEGAN AT 0900 UT AND HAS REMAINED AT  
ABOUT 10 PARTICLES/CM<sup>2</sup>/STER AT GT 10 MEV SINCE THAT TIME. THIS  
EVENT IS MOST LIKELY FROM THE M3/2N FLARE AT 30/0054 UT. THE  
PARTICLE COUNT IS EXPECTED TO DECLINE SLOWLY OVER THE NEXT 24  
HOURS.

III. EVENT PROBABILITIES: 31 MARCH - 02 APRIL

CLASS M 60/60/60

CLASS X 02/02/02

PROTON 02/02/02

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 30 MAR 209

PREDICTED 31 MAR-02 APR 212/210/210

90 DAY MEAN 30 MAR 194

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 29 MAR 14/19

ESTIMATED AFR/AP 30 MAR 13/19

PREDICTED AFR/AP 31 MAR-02 APR 15/20 15/20 16/15

SOLTERWARN

BT