

HFUS 1 BOUL 191400
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 078A
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 1200UT 19 MARCH 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
18/1200UT TO 191200UT:

SOLAR ACTIVITY HAS BEEN RARELY MODERATE THIS PERIOD. AN M1,
NO OPTICAL CORRELATION, OCCURRED AT 18/2048UT AND WAS THE ONLY
M-CLASS EVENT RECORDED THIS PERIOD. REGIONS 2984 (N08E 06) PRODUCED
A C9/SB EVENT AT 18/1920UT. REGIONS 2993 (N13E 70) AND 2991
(N11E 47) HAVE BOTH PRODUCED SMALL C-CLASS EVENTS. REGION 2978
(N13W50) HAS EXHIBITED SLIGHT GROWTH IN AREA. REGION 2984 HAS
STABILIZED IN GROWTH BUT IS MAGNETICALLY COMPLEX. REGION 2993 HAS
SLOWED IT'S GROWTH BUT HAS HAD NEAR CONTINUOUS PLAGE FLUCTUATIONS.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE AS REGIONS 2993 AND 2984
APPEAR CAPABLE OF PRODUCING M-CLASS EVENTS. PREVIOUSLY ACTIVE
LONGITUDES ARE EXPECTED TO RETURN NEAR END OF THIS FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE PAST 24 HOURS.
THE GEOMAGNETIC FIELD IS EXPECTED TO CONTINUE AT UNSETTLED LEVELS.

III. EVENT PROBABILITIES: 20 - 22 MARCH 1981

CLASS M 40/50/55

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 18 MAR 174

ESTIMATED 19 MAR 172

PREDICTED 20-22 MAR 175/181/188

90 DAY MEAN 18 MAR 200

V. GEOMAGNETIC ACTIVITY INDICES

OBSERVED AFR 17 MAR 18 AP 18 MAR 21

ESTIMATED AFR 18 MAR 15 AFR/AP 19 MAR 12/15

PREDICTED AFR/AP 20-22 MAR 10/10 10/10 10/10

SOLTERWARN

BT

KBOU

HFUS 3 BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 0788

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200UT 19 MAR 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
19/1200UT TO 19/2200UT:

SOLAR ACTIVITY HAS BEEN LOW SINCE 191200Z. TWO SUBFLARES AND
ONE CLASS "C" XRAY BURST WAS THE ONLY ACTIVITY NOTED. OBSER-
VATIONS HAVE BEEN SOMEWHAT RESTRICTED DUE TO WEATHER BUT LIMITED
OBS REVEALED REGION 2993 (N13E61) TO BE THE MOST INTEREST-
ING. THIS REGION IS NOW AN "E" TYPE SPOT GROUP WITH BRIGHT,
COMPACT, FLUCTUATING PLAGE AND AN AFS.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD REMAIN GENERALLY LOW BUT CURRENT ANALYSIS
OF REGION 2993 WOULD SUGGEST THAT M CLASS ACTIVITY IS BE-
COMING MORE LIKELY.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETLED. NO MAJOR
CHANGES ARE EXPECTED.

III. EVENT PROBABILITIES: 20 MARCH - 22 MARCH

CLASS M 40/50/55

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 19 MARCH 169

PREDICTED 20-22 MARCH 170/172/177

90 DAY MEAN 19 MARCH 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 18 MARCH 16/21

ESTIMATED AFR/AP 19 MARCH 12/15

PREDICTED AFR/AP 20-22 MARCH 10/12 10/10 10/10

** TENTATIVE **