

HFUS 1 BOU 031400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 093A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 03 APRIL 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

02/1200UT TO 03/1200UT:

SOLAR ACTIVITY IS AT A MODERATE LEVEL. REGION 2999 (S42W81) CONTINUES TO BE RESPONSIBLE HAVING PRODUCED AN M1/1B AT 030211Z (MAX) AND AN M8/2B AT 031015Z (MAX). THE M8/2B WAS A SLOW RISE, LONG DURATION EVENT THAT PRODUCED SWEEP FREQUENCY TYPE II, SHORT WAVE FADES TO 22 MHZ AND A 500 FLUX UNIT BURST AT 2965 MHZ. 2999 IS NEARING THE WEST LIMB BUT WILL PROBABLY CONTINUE TO MAKE ITS PRESENCE FELT UNTIL IT IS A DAY OR SO BEYOND THE LIMB. THE EAST LIMB IS NOW BECOMING INTERESTING AS THE H-ALPHA PHOTO SHOWS A MAZE OF FILAMENT STRUCTURE AND FAIRLY BRIGHT PLAGE SURROUNDING REGIONS 3022 (N06E44) AND 3025 (N10E59). ALSO, SUBFLARES AND POINT BRIGHTENINGS IN REGIONS 3012 (N14W06) AND 3013 (N11E02) SUGGEST THESE REGIONS MAY BECOME MORE DYNAMIC.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE TO HIGH. REGION 2999 REMAINS UNDIMINISHED.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET TO UNSETTLED. ANTICIPATED STORM CONDITIONS FOR 4 APRIL ARE STILL LIKELY TO DEVELOPE. THE M8/2B AT 031015Z (MAX) IS EXPECTED TO ENHANCE THE PROTON LEVELS WITH 10 MEV PARTICLES LIKELY TO EXCEED EVENT CRITERIA OF 10 PROTONS/50 CM/SEC/STER BY 031700Z.

III. EVENT PROBABILITIES: 04 APRIL - 06 APRIL

CLASS M 80/80/80

CLASS X 35/20/05

PROTON 35/20/05

PCAF RED

IV. OTTAWA 10.7 FLUX

OBSERVED 02 APRIL 213

ESTIMATED 03 APRIL 220

PREDICTED 04-06 APRIL 220/220/225

90 DAY MEAN 02 APRIL 195

V. GEOMAGNETIC A INDICES

OBSERVED AFR 01 APRIL 21 AP 02 APRIL 09

ESTIMATED AFR 02 APRIL 08 AFR/AP 03 APRIL 09/20

PREDICTED AFR/AP 04-06 APRIL 40/30 25/25 14/10

SOLTERWARN

BT

HFUS 3 BOU 032200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 093B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200UT 03 APRIL 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
03/1200UT TO 03/2200UT:

SOLAR ACTIVITY HAS BEEN MODERATE. REGION 2999 (S43W86) PRODUCED AN M-LEVEL XRAY EVENT WITH TWO MAXIMA OF M1.1 AT 1825 UT AND M1.5 AT 1845 UT. ALTHOUGH POOR WEATHER HAS PREVENTED OBSERVATIONS AT REGULAR REPORTING STATIONS, BIG BEAR AND SAN FERNANDO OBSERVATORIES IN CALIFORNIA HAVE PROVIDED H ALPHA SUPPORT. THEY REPORTED THAT NEW REGIONS ON THE NORTHEAST LIMB WERE RESPONSIBLE FOR A C8 X-RAY EVENT MAXING AT 1701UT.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE TO HIGH.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED FOR THE PAST 10 HOURS. A SLIGHT PROTON ENHANCEMENT FROM THIS MORNINGS M8 FLARE BEGAN NEAR 1300UT BUT HAS NOT EXCEEDED EVENT THRESHOLDS. THE GEOMAGNETIC FIELD IS STILL EXPECTED TO REACH STORM LEVELS TOMORROW FROM EVENTS ON 04 APRIL.

III. EVENT PROBABILITIES: 04 APRIL - 06 APRIL

CLASS M 80/80/80

CLASS X 35/20/05

PROTON 35/20/05

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 03 APRIL 221

PREDICTED 04-06 APRIL 220/225/225

90 DAY MEAN 03 APRIL 196

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 02 APRIL 09/09

ESTIMATED AFR/AP 03 APRIL 12/10

PREDICTED AFR/AP 04-06 APRIL 40/30 25/25 14/10

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