

HEUS, BCU 241400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDR NUMBER 083A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 24 MARCH 1981

I. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
23/1200UT TO 24/1200UT:

SOLAR ACTIVITY HAS BEEN MODERATE SINCE 23/1200UT. FOUR M-CLASS X-RAY FLARES OCCURRED: AN UNASSOCIATED M3 AT 23/1209UT, AN M1/1B AT 23/1739UT, AN M1/1N AT 23/2118UT AND AN M2/1B AT 24/0159UT, ALL FROM REGION 2984 (N08W63). ALTHOUGH REGION 2984 HAS CONTINUED MODERATE ACTIVITY, AND RETAINS ONE OR TWO DELTAS, FLARES ARE BECOMING LESS ENERGETIC AND ITS MAGNETIC GRADIENT IS UNIMPRESSIVE. REGION 2993 (N15E04) EXPERIENCED PENUMRAL GROWTH AND DEVELOPED TWO DELTAS. NO NEW REGIONS WERE CONFIRMED TODAY.

II. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE THROUGH THE FORECAST PERIOD DUE PRIMARILY TO THE HISTORY OF REGION 2984 AND INCREASED POTENTIAL IN REGION 2993. IF REGION 2984 COLLAPSES SUDENLY AN ISOLATED X-CLASS FLARE MAY BECOME PROBABLE.

III. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET FOR THE PAST 24 HOURS AND IS EXPECTED TO BECOME UNSETTLED LATE ON 24 MAR AND ACTIVE ON 25 MAR DUE TO THE M3/2B FLARE WHICH OCCURRED 22/2356UT. UNSETTLED CONDITIONS ARE EXPECTED FOR 27 MAR.

IV. EVENT PROBABILITIES: 25 MAR - 27 MAR

CLASS M 80/80/80

CLASS X 10/10/10

PROTON 10/05/05

PCAF YELLOW

V. OTTAWA 10.7 FLUX

OBSEVED 23 MAR 189

ESTIMATED 24 MAR 185

PREDICTED 25-27 MAR 185/180/180

90 DAY MEAN 23 MAR 196

VI. GEOMAGNETIC A. INDICES

OBSEVED AFR 22 MAR 05 APR 23 MAR 07

ESTIMATED AFR 23 MAR 05 APR/APR 24 MAR 07/09

PREDICTED AFR/APR 25-27 MAR 20/25 14/20 10/12

SOLTERWARN

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HEIUS 3 BOU 242200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SD E NUMBER 083B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200UT 24 MARCH 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
24/1200UT TO 24/2200UT:

SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 10 HOURS WITH ONLY
C-CLASS SUNFLARE ACTIVITY OCCURRING FROM TWO REGIONS, 2984
(N 02W 68) AND 2993 (N 14W 02). REGION 2984 PRODUCED THE LARGEST
EVENT, A C5/SR AT 1905Z MAXIMUM.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE DURING THE NEXT 24
HOURS, BUT WITH THE INDICATED DECAY IN REGION 2984, ALONG WITH
ITS WEST LIMB PASSAGE EARLY ON THE 26TH, A GENERAL DECREASE IN
FREQUENCY AND LEVELS ARE FORECAST.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN QUIET DURING THE PAST 10 HOURS.
UNSETTLED TO ACTIVE CONDITIONS ARE EXPECTED ON THE 25TH OF MARCH
IN RESPONSE TO FLARES OBSERVED ON THE 22ND OF MARCH AND A FILA-
MENT LOCATED AT S28E10 (ON 19 MARCH) WHICH DISAPPEARED BETWEEN
THE 21ST AND 22ND OF MARCH.

III. EVENT PROBABILITIES: 25 MARCH - 27 MARCH

CLASS M . . . 80/70/60

CLASS X . . . 10/10/05

PROTON . . . 10/05/05

PCAF . . . GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED . . . 24 MARCH 185

PREDICTED . . . 25-27 MARCH 180/175/170

90-DAY MEAN . . . 24 MARCH 196

V. GEOMAGNETIC INDICES

OBSERVED . . . AFR/AP . . . 23 MARCH 03/07

ESTIMATED . . . AFR/AP . . . 24 MARCH 04/05

PREDICTED . . . AFR/AP . . . 25-27 MARCH 15/20/12/15/10/12

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