

HFUS , EOU 241400

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 083A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 24 MARCH 1981

IA. 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 23/1738UT, 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 BE-
COMING LESS ENERGETIC AND ITS MAGNETIC GRADIENT IS UNIMPRESSIVE.
REGION 2993 (N15E04) EXPERIENCED PENUMBRA GROWTH AND DEVELOPED TWO
DELTAS. NO NEW REGIONS WERE CONFIRMED TODAY.

IB. SOLAR ACTIVITY FORECAST:

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

II. 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.

III. EVENT PROBABILITIES: 25 MAR - 27 MAR

CLASS M 80/80/80

CLASS X 10/10/10

PROTON 10/05/05

SCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 23 MAR 189

ESTIMATED 24 MAR 185

PREDICTED 25-27 MAR 185/180/180

90 DAY MEAN 23 MAR 196

V. GEOMAGNETIC A INDICES

OBSERVED AFR 22 MAR 05 AP 23 MAR 07

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

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

SOLTERWARN

BT

HEIJS 3 R0U 242200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDE 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 SUBFLARE ACTIVITY OCCURRING FROM TWO REGIONS, 2984
(N03W68) AND 2993 (N14W02). REGION 2984 PRODUCED THE LARGEST
EVENT, A C5/SP 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 A 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

SOLTERWARN

BT