

HEUS 1 BOU 131305

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 133A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 13 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
12/1200UT TO 13/1200UT:

SOLAR ACTIVITY HAS BEEN HIGH. AN X1/2P FLARE OCCURRED IN REGION
3015 (N12E52). MAXIMUM AT 13/0425Z, ACCOMPANIED BY SHORTWAVE
FADE AND STRONG TYPE IV CONTINUUM REPORTED FROM CULGOORA. C
CLASS XRAY, SUP CLASS OPTICAL EVENTS FROM REGION 3106, 3100
(S05W26), 3102 (N12W02), 3099 (N10W24) MADE UP THE BALANCE
OF ACTIVITY. REGION 3099 HAS DECLINED IN AREA AND SPOT NUMBER
BUT REMAINS COMPLEX. REGION 3106 APPEARS VERY COMPLEX. BOTH
REGIONS CONTAIN DELTAS.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD BE MODERATE TO HIGH DUE TO ACTIVITY FROM
REGIONS 3106 AND 3099 WITH POSSIBLE CONTRIBUTIONS FROM
OTHER REGIONS.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. IT SHOULD CONTINUE AT
UNSETTLED TO ACTIVE LEVELS UNTIL LATE ON 15 MAY OR EARLY 16 MAY
WHEN ONSET TO MINOR STORM LEVELS MAY BE EXPECTED DUE TO THE X1
FLARE TODAY.

III. EVENT PROBABILITIES: 14-16 MAY

CLASS M 90/90/90

CLASS X 25/25/25

PROTON 15/15/15

SCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 12 MAY 219

ESTIMATED 13 MAY 225

PREDICTED 14-16 MAY 230/230/230

90 DAY MEAN 12 MAY 214

V. GEOMAGNETIC A INDICES

OBSERVED AFR 11 MAY 33 AP 12 MAY 15

ESTIMATED AFR 12 MAY 10 AFR/AP 13 MAY 14/14

PREDICTED AFR/AP 14-16 MAY 14/20 14/20 18/20

SOLTERWARN

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HFUS 3 BOU 132200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO

SDE NUMBER 133B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200 UT 13 MAY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 13/1200 UT TO 13/2200 UT: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 3106

(N14E43) HAS BEEN DIVIDED INTO TWO REGIONS. NEW REGION 3112

(N15E52) IS SEPARATE MAGNETICALLY BUT THE PLAGE AREAS OF THE

TWO REGIONS ARE VERY CLOSE AND INTERACTIVE. REGION 3112 PRODUCED

A M1/IN AT 1817 UT. REGION 3106 HAS PRODUCED ONLY SMALL FLARES

BUT REMAINS COMPLEX WITH STRONG MAGNETIC FIELD GRADIENTS. REGION

3099 (N11W28) PRODUCED A C3/SB AT 1444 UT AND A C3/SN AT 1611 UT

NEW REGION 3113 (S26E76) HAS ROTATED ONTO THE DISK WITH A H-TYPE

SPOT GROUP IN A MODERATE INTENSITY PLAGE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE

MODERATE TO HIGH WITH MAJOR FLARES POSSIBLE FROM REGIONS 3099,

3106 AND TO A LESSER EXTENT 3112.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS

BEEN UNSETTLED. UNSETTLED CONDITIONS ARE EXPECTED UNTIL LATE ON

15 MAY OR EARLY 16 MAY WHEN ACTIVE CONDITIONS ARE POSSIBLE FROM

THE X1/3B FLARE 13/0425 UT.

III. EVENT PROBABILITIES 14 MAY, - 16 MAY

CLASS M 90/90/90

CLASS X 25/25/25

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 MAY 217

PREDICTED 14-16 MAY 217/216/213

90-DAY MEAN 13 MAY 214

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 12 MAY 10/15

ESTIMATED AFR/AP 13 MAY 11/14

PREDICTED AFR/AP 14-16 MAY 14/20 - 14/20 - 18/20

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