

2924
HEUS 1 BOU 241400
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 055A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 24 FEB 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

23/1200UT TO 24/1200UT:

SOLAR ACTIVITY CONTINUES TO BE MODERATE. A LARGE NEW REGION 2958 (S13E80), WHICH WAS PRODUCING SURGES ON THE LIMB YESTERDAY, PRODUCED A M5/SB FLARE AT 24/0015UT. THIS REGION IS THE RETURN OF REGION 2826 WHICH DEVELOPED ON THE DISK LAST ROTATION. IT PRODUCED 4 CLASS M EVENTS FROM FEB 6-10, AND WAS GROWING AND ACTIVE AS IT ROTATED BEYOND WEST LIMB. REGION 2951 (N12W41) CONTAINS A LARGE SPOT GROUP, CLASS/AREA E/1400, AND HAS DEVELOPED A DELTA CONFIGURATION BUT CONTINUES TO PRODUCE ONLY SMALL SUB-FLARES. REGIONS 2953 (S17E25) AND 2954 (S15E54) ALSO CONTINUE TO PRODUCE NUMEROUS SMALL FLARES. A SMALL NEW REGION 2957 (S08E49) WAS NUMBERED.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT A MODERATE LEVEL WITH CLASS M OR GREATER EVENTS LIKELY FROM REGION 2958 AND CLASS M EVENTS POSSIBLE FROM REGIONS 2951, 2953 AND 2954.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED WITH NEAR ACTIVE CONDITIONS ON THE 23RD. UNSETTLED CONDITIONS ARE EXPECTED DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 25-27 FEB

CLASS M 75/75/75

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 23 FEB 228

ESTIMATED 24 FEB 230

PREDICTED 25-27 FEB 232/234/235

90 DAY MEAN 23 FEB 200

V. GEOMAGNETIC INDICES

OBSERVED AFR 22 FEB 07 AP 23 FEB 09

ESTIMATED AFR 23 FEB 14 AFR/AP 24 FEB 07/08

PREDICTED AFR/AP 25-27 FEB 08/08 08/08 08/10

SOLTERWARN

BT

HFUS 3 BOU 242200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SD F NUMBER 055B

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

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

SOLAR ACTIVITY REACHED HIGH LEVELS WITH TWO X-CLASS XRAY EVENTS
DURING THE PERIOD. THE FIRST EVENT REACHED MAXIMUM AT 1226 UT.
(THERE WAS NO RELIABLE OPTICAL CORRELATION, BUT REGION 2954
(S16E48) OR NEW REGION 2958 (S14F72) ARE MOST LIKELY RESPONSIBLE.)
THE OTHER EVENT, AN X1/2B FLARE, MAXED AT 1939 UT IN REGION 2958.

I B. SOLAR ACTIVITY FORECAST :

MODERATE TO HIGH LEVELS OF ACTIVITY ARE FORECAST. REGION 2951
(N12W48) WAS "HOT" DURING THIS PERIOD, BUT RELATIVELY INACTIVE,
CONSIDERING ITS LARGE SPOT AREA (1500 MILLIONTHS). REGION
2958 IS STILL CAPABLE OF PRODUCING X-CLASS EVENTS.

II. GEOPHYSICAL SUMMARY AND FORECAST :

THE GEOMAGNETIC FIELD HAS BEEN UNSETLED TO ACTIVE. INTERMITTENT
FLARE-RELATED ACTIVE LEVELS ARE EXPECTED FOR THE NEXT SEVERAL DAYS
OTHERWISE THE FIELD WILL BE UNSETLED. THE LIKELIHOOD OF A PROTON
EVENT WILL BE HIGHER OVER THE NEXT THREE DAYS, WITH REGION 2951
IN EXCELLENT POSITION ON THE DISK.

III. EVENT PROBABILITIES: 25-27 FEB.

CLASS M 90/90/90

CLASS X 20/20/20

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 24 FEB 241

PREDICTED 25-27 FEB 248/254/254

90 DAY MEAN 24 FEB 200

V. GEOMAGNETIC A/ INDICES

OBSERVED AFR/AP 23 FEB 13/09

ESTIMATED AFR/AP 24 FEB 10/12

PREDICTED AFR/AP 25-27 FEB 10/15 10/15 12/18

SOLTERWARN

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