

1. BOU 211300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 294A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 21 OCT 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

20/1200Z TO 21/1200Z / 20/1200Z TO 21/1200Z :

SOLAR ACTIVITY HAS BEEN MODERATE WITH REGION 3403 (S10W35)

PRODUCING THE ONLY M-CLASS EVENTS REPORTED THIS PERIOD, A M1/1B AT 20/1449UT AND A M1/SB AT 21/0622UT, ONLY MINOR RADIO BURSTS WERE RECORDED WITH THESE EVENTS. REGION 3406 (S08W11) HAS SHOWN SOME MINOR INCREASE IN MAGNETIC STRENGTH. REGION 3403 HAS BEEN GENERALLY STABLE THIS PERIOD, HOWEVER STRONG TYPE III RADIO METEOR-WAVE BURSTS HAVE BEEN RECORDED FROM NEAR REGION 3403, THIS MAY INDICATE THAT REGION 3403 IS GETTING READY TO CHANGE AND BECOME ACTIVE.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT MODERATE LEVELS.

REGIONS 3403 AND 3406 HAVE THE POTENTIAL FOR AN ISOLATED X-CLASS EVENT, IF RAPID CHANGE OCCURS IN EITHER REGION.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN AT OR NEAR MINOR STORM LEVELS THIS PERIOD. THE FIELD IS EXPECTED TO BE ACTIVE TO MINOR STORM THROUGH 22 OCT AND ACTIVE TO UNSETTLED THE REMAINDER OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 22 OCT-24 OCT

CLASS M 80/80/80

CLASS X 15/15/10

PROTON 15/15/10

CAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 OCT 267

ESTIMATED 21 OCT 245

PREDICTED 22 OCT-24 OCT 240/238/230

90 DAY MEAN 20 OCT 224

V. GEOMAGNETIC A INDICES

OBSERVED AFR 19 OCT 016 AP 20 OCT 046

ESTIMATED AFR 20 OCT 039 AFR/AP 21 OCT 030/040

PREDICTED AFR/AP 22 OCT-24 OCT 010/012-015/015-015/015

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HEUS 3 POU 212200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLORADO
SDE NUMBER 294B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 21 OCTOBER 1981

I. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 21/1200Z
TO 21/2100Z: SOLAR ACTIVITY HAS REMAINED MODERATE. AN M1 (1338Z
MAX) WAS ASSOCIATED WITH A LONG-LIVED SN IN REGION 3403 (S11W40).
THIS REGION ALSO PRODUCED A C9/1B AT 1725Z (X-RAY MAX). MINOR
CENTIMETRIC RADIO BURSTS WERE OBSERVED WITH BOTH FLARES.
OBSERVATIONS WERE HAMPERED TODAY BY WEATHER. REGIONS 3419 (S29E51)
AND 3420 (S30E70) WERE ADDED TODAY. THE SUNSPOT STRUCTURE AND
ATTENDANT PLAGE FOR BOTH REGIONS IS SMALL.

II. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
CONTINUE AT A MODERATE LEVEL. REGION 3403 IS CAPABLE OF
PRODUCING AN ISOLATED CLASS X EVENT.

III. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC STORM
WHICH BEGAN NEAR 20/1000Z ENDED AT 21/1200Z. THE FIELD IS
EXPECTED TO BE UNSETTLED TO SLIGHTLY ACTIVE THROUGH 24 OCTOBER.

IV. EVENT PROBABILITIES 22 OCTOBER - 24 OCTOBER

CLASS M 80/80/80

CLASS X 15/15/10

PROTON 15/15/10

PCAF YELLOW

V. OTTAWA 10.7 CM FLUX

OBSERVED 21 OCTOBER 240

PREDICTED 22-24 OCTOBER 230/222/210

30-DAY MEAN 21 OCTOBER 224

VI. GEOMAGNETIC INDICES

OBSERVED AFR/AP 20 OCTOBER 43/46

ESTIMATED AFR/AP 21 OCTOBER 22/29

PREDICTED AFR/AP 22-24 OCTOBER 10/12 - 15/15 - 15/15

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