

HEUIS ; R011 221300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SFC NUMBER 295A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 22 OCT 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
21/1200Z TO 22/1200Z:

SOLAR ACTIVITY HAS CONTINUED AT A MODERATE LEVEL DUE TO A M1/SN
FROM REGION 3403 (S11W48) AT 21/1338UT, THIS EVENT ALSO
PRODUCED MINOR RADIO BURSTS. REGIONS 3406 (S08W24), 3415
(N18W21) AND 3416 (S08E23) HAVE ALL PRODUCED SMALL C-CLASS
EVENTS. REGION 3419 (S27E40) HAS SHOWN RAPID GROWTH THIS
PERIOD. REGION 3403 CONTINUES TO BE GENERALLY STABLE WITH ONLY
MINOR CHANGES IN MAGNETIC STRUCTURE BEING REPORTED.

JB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD REMAIN AT MODERATE LEVELS UNTIL REGION
3403 ROTATES OVER THE WEST LIMB. REGION 3403 RETAINS THE
POTENTIAL FOR AN ISOLATED X-CLASS EVENT, HOWEVER THE
POSSIBILITY CONTINUES TO DECREASE. WITH SEVERAL OLD ACTIVE
REGIONS DUE TO RETURN IN THE NEXT THREE DAYS, ALONG WITH THE
NEW DEVELOPING REGIONS, THE NUMBER OF SMALL EVENTS IS EXPECTED
TO INCREASE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO ACTIVE THIS PERIOD.
THE SOLAR WIND VELOCITY IS HIGH SO ACTIVE CONDITIONS ARE
EXPECTED TO CONTINUE FOR THE NEXT 24 HOURS. THEN ACTIVE TO
UNSETTLED CONDITIONS FOR THE REST OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 23 OCT-25 OCT

CLASS M 60/80/80

CLASS X 15/10/05

PROTON 15/10/05

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 OCT 240

ESTIMATED 22 OCT 222

PREDICTED 23 OCT-25 OCT 215/210/190

90 DAY MEAN 21 OCT 224

V. GEOMAGNETIC A INDICES

OBSERVED AFR 20 OCT 043 AP 21 OCT 029

ESTIMATED AFR 21 OCT 021 AFR/AP 22 OCT 024/030

PREDICTED AFR/AP 23 OCT-25 OCT 015/015-015/015-010/010

SOLTERWARM

BT

WHS 3 BOH 220200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDE NUMBER 205B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 22 OCT 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/1200Z
TO 22/2100Z:

SOLAR ACTIVITY WAS LOW TODAY. MOST OF THE SUBFLARE ACTIVITY THIS
PERIOD WAS IN REGION 3403 (S11W53), WHICH REMAINS THE MOST
INTERESTING REGION ON THE DISK.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE WITH ONE OR TWO M-CLASS
EVENTS PER DAY.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD WAS AT MINOR STORM LEVELS THROUGHOUT
THIS PERIOD. THE MOST LIKELY CAUSE OF THIS ACTIVITY IS A FILAMENT
DISAPPEARANCE ON 18 OCT. THE FIELD SHOULD SETTLE DOWN TO ACTIVE
OR UNSETTLED LEVELS EARLY ON 23 OCT.

III. EVENT PROBABILITIES 23-25 OCT:

CLASS M 80/80/80

CLASS X 15/10/05

PROTON 15/10/05

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 OCT 221

PREDICTED 23-25 OCT 210/200/180

90-DAY MEAN 22 OCT 224

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 21 OCT 26/29

ESTIMATED AFR/AP 22 OCT 35/40

PREDICTED AFR/AP 23-25 OCT 15/15 - 15/15 - 10/10

SOLTERWARN

BT