

HEUUS 1, BDU 221300

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

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 22 OCT 1981

I. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM

21/1200Z TO 02/1200Z

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.

II. 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.

III. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETLED 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 UNSETLED CONDITIONS FOR THE REST OF THE FORECAST PERIOD.

IV. EVENT PROBABILITIES 23 OCT-25 OCT

CLASS M 80/80/80

CLASS X 15/10/05

PROTON 15/10/05

PCAF YELLOW

V. 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

VI. 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

SOLARFLARE

BT

HELIOS 3 ROM 220000

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO.

CFE NUMBER: 2058

JOINT USAF/NCAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED: 2200Z 22 OCT 1981

I. 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 (S 11W53), WHICH REMAINS THE MOST  
INTERESTING REGION ON THE DISK.

II. SOLAR ACTIVITY FORECAST:

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

III. 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.

IV. EVENT PROBABILITIES, 23-25 OCT:

CLASS M: 80/80/80

CLASS X: 15/10/05

PROTON: 15/10/05

PCAF: YELLOW

V. OTTAWA 10.7 CM FLUX

OBSERVED: 22 OCT 221

PREDICTED: 23-25 OCT 210/200/180

90-DAY MEAN: 22 OCT 224

VI. 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

SOLAR/WARN

BT