

HFUS 1 BOU 231300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 082A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1300Z 23 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
22/1200Z TO 23/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. NEW  
REGION 3659 (N11E70) PRODUCED A C9/SF AT 22/1627UT AND AN M1/SB  
AT 23/0526UT. BOTH FLARES PRODUCED MINOR CM BURSTS. REGION  
3659 IS A MODERATELY LARGE E CLASS SUNSPOT GROUP AND THE RETURN  
OF 3626 WHICH WAS DECAYING NEAR WEST LIMB LAST ROTATION. THE  
TRAILER OF 3659 APPEARS LARGER THAN ITS LEADER MAKING FOR AN  
ANOMALOUS CONFIGURATION. ACTIVE SURGING AND CORONAL RAIN HAVE  
ACCOMPANIED THIS LIMB TRANSIT. ANOTHER REGION MAY BE TRAILING  
3659. THREE OTHER REGIONS WERE NUMBERED TODAY - 3657 (S09E37),  
3658 (S12E67), AND 3660 (S17E76). OF THESE THREE ONLY 3658  
BEARS CONSIDERATION DUE TO ITS D CLASS SUNSPOT STRUCTURE.  
REGION 3643 (S07W81) CONTINUES TO DECAY SLOWLY AND SIMPLIFY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE  
MODERATE. ALTHOUGH ANALYSIS IS DIFFICULT, REGION 3659 APPEARS  
CAPABLE OF PRODUCING SEVERAL CLASS M FLARES DURING THE NEXT  
THREE DAYS DUE MAINLY TO ITS SIZE, CONFIGURATION, AND APPARENT  
GROWING STATE. MAJOR FLARES FROM 3659 ARE A POSSIBILITY. 3643  
MAY PRODUCE A MID-LEVEL CLASS M FLARE PRIOR TO WEST LIMB  
TRANSIT.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
CALMED TO UNSETTLED LEVELS SINCE THE MINOR STORM EARLY ON 22  
MARCH. UNSETTLED TO SLIGHTLY ACTIVE CONDITIONS ARE EXPECTED  
FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 24 MAR-26 MAR

CLASS M 70/70/70  
CLASS X 10/10/10  
PROTON 05/01/01  
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 MAR 215  
ESTIMATED 23 MAR 210  
PREDICTED 24 MAR-26 MAR 204/196/200  
90 DAY MEAN 22 MAR 200

V. GEOMAGNETIC A INDICES

OBSERVED AFR 21 MAR 018 AP 22 MAR 030  
ESTIMATED AFR 22 MAR 030 AFR/AP 23 MAR 011/014  
PREDICTED AFR/AP 24 MAR-26 MAR 010/012-013/018-010/012

SOLTERWARN

BT

HXUS BOU 231300  
PREDM 07024 07025 07026  
PREDX 01024 01025 01026  
PREDP 00524 00125 00126  
PCAFT 00124  
TFNCM 20424 19625 20026  
AFRED 01024 01325 01026  
AFAPF 01224 01825 01226  
KKK 33233 32223 34433  
BT

C5  
113/1836

HFUS 3 BOU 232200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 082B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 23 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
23/1200Z TO 23/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THIS  
PERIOD WITH ONLY C2/C3 CLASS FLARES OCCURRING. SOME MINOR  
SURGING IN REGION 3643 (S06W90) ACCOMPANIES ITS TRANSIT OF  
THE WEST LIMB. REGION 3655 (N14E15) MAY BE SHOWING SOME  
REORGANIZATION TOWARD FUTURE FLARE PRODUCTION. MINOR ACTIVITY  
HAS BEEN OBSERVED IN REGION 3653 (S12E14). REGION 3659 (N11  
E64) HAS SHOWN ONLY MINOR ACTIVITY DESPITE EKI SPOT  
CONFIGURATION. NO NEW REGIONS HAVE BEEN OBSERVED BUT ADDITIONAL  
REGIONS MAY BE ABOUT TO ROTATE ONTO THE DISK.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE  
MODERATE FOR THE FORECAST PERIOD. REGION 3659 (N11E64) SHOWS  
THE MOST PROMISE OF M CLASS FLARES.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN UNSETTLED FOR THE LAST 24 HOURS. THIS CONDITION IS  
EXPECTED TO CONTINUE THROUGHOUT THE FORECAST PERIOD.

III. EVENT PROBABILITIES 24 MAR-26 MAR

CLASS M 70/70/70

CLASS X 10/10/10

PROTON 05/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 MAR 204

PREDICTED 24 MAR-26 MAR 195/190/193

90 DAY MEAN 23 MAR 200

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 MAR 029/030

ESTIMATED AFR/AP 23 MAR 011/014

PREDICTED AFR/AP 24 MAR-26 MAR 010/012-013/015-010/012

SOLTERWARN

BT

HXUS ROU 232200

PREDM 07024 07025 07026

PREDX 01024 01025 01026

PREDP 00524 00125 00126

PCAFT 00124

TENCM 19524 19025 19326

AFRED 01024 01325 01026

AFAPF 01224 01525 01226

BT