

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

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HXUS BOU 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