

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

C5

113 / 1836

HXUS BOU 231300

PREDM 07024 07025 07026

PREDX 01024 01025 01026

PREDP 00524 00125 00126

PCAF 00124

TENCM 20424 19625 20026

AFRED 01024 01325 01026

AFAPF 01224 01825 01226

KKK 33233 32223 34433

BT

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 (N11E64) 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 UNSETLED 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 BOU 232200

PREDM 07024 07025 07026

PREDX 01024 01025 01026

PREDP 00524 00125 00126

PCAF 00124

TENCM 19524 19025 19326

AFRED 01024 01325 01026

AFAPF 01224 01525 01226

BT