

HFXS 1 BOU 191300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 078A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 19 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/1200Z TO 19/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE DURING THIS PERIOD. REGION 3643 (S06W27) PRODUCED THE ONLY TWO M-CLASS EVENTS THAT WERE OBSERVED A M1/1N AT 18/2125UT AND A M2/2B AT 19/0418UT BOTH EVENTS HAD ONLY MINOR RADIO WITH NO TYPE II/IV SWEEPS BEING REPORTED. SEVERAL C-CLASS EVENTS HAVE BEEN OBSERVED FROM SIX REGIONS, THE LARGEST "C" EVENT WAS A C6/SN EVENT AGAIN FROM 3643. REGION 3643 HAS SHOWN NO GROWTH THIS PERIOD. REGION 3649 (N15W07) AND 3651 (N04W23) HAVE BOTH EXHIBITED MINOR GROWTH THIS PERIOD WITH THE REST OF THE REGIONS STABLE OR SHOWING SIGNS OF DECAY. TWO NEW GROUPS TODAY ARE 3653 (S14E75) AND 3654 (N07E36), BOTH SIMPLE GROUPS AT THIS TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE GENERALLY MODERATE DURING THE FORECAST PERIOD. REGION 3643, ALTHOUGH STABLE, SHOULD CONTINUE TO PRODUCE M-CLASS EVENTS FOR THE FIRST PORTION OF THE FORECAST THEN, IF DECAY IS RAPID, A CHANCE FOR AN ISOLATED X-CLASS EVENT EXISTS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS ACTIVE DURING THE PAST 24 HOURS. WITH ISEE-3 INFORMATION SHOWING A DECREASE IN THE SOLAR WIND, THE EFFECTS OF THE EQUATORIAL CORONAL HOLE (CARRINGTON L=145) AND THE FILAMENT WHICH DISAPPEARED ON 15 MARCH ARE BELIEVED TO BE OVER. THE FIELD IS EXPECTED TO BE GENERALLY UNSETTLED UNTIL NEAR THE END OF FORECAST WHEN A SHORT PERIOD OF ACTIVE CONDITIONS ARE EXPECTED DUE TO THE COMBINED EFFECTS OF THE SEVERAL RECENT M-CLASS EVENTS.

III. EVENT PROBABILITIES 20 MAR-22 MAR

CLASS M 70/60/50

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 MAR 229

ESTIMATED 19 MAR 224

PREDICTED 20 MAR-22 MAR 220/210/200

90 DAY MEAN 18 MAR 197

V. GEOMAGNETIC A INDICES

OBSERVED AFR 17 MAR 013 AP 18 MAR 015

ESTIMATED AFR 18 MAR 018 AFR/AP 19 MAR 012/020

PREDICTED AFR/AP 20 MAR-22 MAR 010/012-010/012-015/018

SOLTERWARN

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PREDM 07020 06021 05022

PREDX 00520 00521 00522

PREDP 00520 00521 00522

PCAF 00120

TENCM 22020 21021 20022

AFRED 01020 01021 01522

AFAPP 01220 01221 01822

KKK 23333 22222 33322

BT

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FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 078B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY

ISSUED 2200Z 19 MAR 1982

I A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/1200Z TO 19/2100Z:

SOLAR ACTIVITY SINCE 19/1200Z HAS BEEN MODERATE. AN M2/1B AT 19/1553Z (MAX) FROM REGION 3643 (S07W35) WAS THE MOST SIGNIFICANT EVENT. REGION 3643 HAS A WEAK DELTA MAGNETIC CONFIGURATION AND REMAINS A LARGE GROUP WITH A THREATENING APPEARANCE. REGION 3652 (N04E48) HAS ALSO PRODUCED ACTIVITY THIS PERIOD BUT IT HAS ALL BEEN OF THE SUBFLARE VARIETY. THIS REGION IS A DECAYING C-TYPE GROUP. THE OTHER DISK FEATURES ARE BASICALLY QUIET.

I B. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD CONTINUE MODERATE AS 3643 IS SEVERAL DAYS AWAY FROM WEST LIMB PASSAGE.

I I. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. UNSETTLED CONDITIONS ARE EXPECTED TO CONTINUE FOR THE NEXT 36 TO 48 HOURS.

III. EVENT PROBABILITIES 20-22 MAR

CLASS M 70/60/50

CLASS X 05/05/05

PROTON 05/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 MAR 224

PREDICTED 20-22 MAR 220/210/200

50-DAY MEAN 19 MAR 198

V. GEOMAGNETIC A-F INDICES

OBSERVED AFR/AP 18 MAR 20/15

ESTIMATED AFR/AP 19 MAR 12/12

PREDICTED AFR/AP 20-22 MAR 10/12 - 10/12 - 15/15

SOLTERWARN

BT