

HFXS 1 BOU 201300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 079A
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 20 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/1200Z TO 20/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS. REGION 3643 (S07W41) PRODUCED THE ONLY M-CLASS ACTIVITY, AN M2/1B FLARE AT 19/1530Z. THIS EVENT WAS ACCCOMPANIED BY MODEST RADIO NOISE BURSTS FROM 1415 TO 15,800 MHZ AND A MODERATE STRENGTH SHORTWAVE FADE TO 22 MHZ. THE REGION WAS THE LEADING FLARE PRODUCER ON THE DISK WITH 8 C-CLASS SUBFLARES IN ADDITION TO THE M2. REGIONS 3649 (N15W21) AND 3652 (N04E42) ALSO MADE SOME CONTRIBUTION TO C-CLASS SUBFLARE PRODUCTION. REGION 3643 HAS BEEN VARIOUSLY REPORTED AS DECAYING, RESTRUCTURING AND NOW GROWING. REGIONS 3652 AND 3649 ARE REPORTED TO BE GROWING AND THE LATTER EVIDENTLY NOW CONTAINS A WEAK DELTA CONFIGURATION. REGION 3655 (N13E66) HAS BEEN NUMBERED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO LOW. AS WAS POINTED OUT YESTERDAY, RAPID DECAY OF REGION 3643 COULD RESULT IN AN X-CLASS FLARE. FOR THE TIME BEING, THE REGION SEEMS TO BE DISPOSING OF ENERGY AT A REGULAR RATE AND, HENCE, SHOULD ONLY BE RESPONSIBLE FOR SMALL M-CLASS EVENTS. OTHER REGIONS MUST BE CONSIDERED ONLY A MINOR THREAT.

II. GEOPHYSICAL SUMMARY AND FORECAST: GEOMAGNETIC ACTIVITY HAS BEEN UNSETTLED DURING THE PAST 24 HOURS. ACTIVITY IS EXPECTED TO CONTINUE UNSETTLED UNTIL LATE ON 22 MARCH WHEN ACCUMULATED EFFECTS OF A SERIES OF SMALL M-CLASS FLARES IN REGION 3643 ARE EXPECTED TO REACH THE EARTH. AT THAT POINT, THE FIELD SHOULD BECOME ACTIVE FOR A DAY OR TWO.

III. EVENT PROBABILITIES 21 MAR-23 MAR

CLASS M 60/60/50

CLASS X 05/05/02

PROTON 05/05/02

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 MAR 224

ESTIMATED 20 MAR 220

PREDICTED 21 MAR-23 MAR 215/200/190

90 DAY MEAN 19 MAR 198

V. GEOMAGNETIC A INDICES

OBSERVED AFR 18 MAR 020 AP 19 MAR 012

ESTIMATED AFR 19 MAR 012 AFR/AP 20 MAR 010/012

PREDICTED AFR/AP 21 MAR-23 MAR 010/012-015/015-020/018

SOLTERWARN

BT

HXUS BOU 201300
PREDM 06021 06022 05023
PREDX 00521 00522 00223
PREDP 00521 00522 00223
PCAFT 00121
TENCM 21521 20022 19023
AFRED 01021 01522 02023
AFAPF 01221 01522 01823
KKK 12233 32223 34332
BT

HFUS 3 BOU 202200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 079B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 20 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/1200Z TO 20/2100Z: SOLAR ACTIVITY HAS BEEN LOW THIS PERIOD. NUMEROUS SUBFLARES HAVE OCCURRED IN SEVERAL REGIONS, BUT NONE WERE SIGNIFICANT. REGION 3643 (S07W49) REMAINS POTENTIALLY ACTIVE IN ITS CENTER AND SOUTH EAST SPOTS WHERE SMALL FLARES HAVE BEEN OCCURRING. NEW REGION 3655 (N14E57) IS GROWING AND IMPROVING ITS POTENTIAL FOR SMALL SUBFLARES.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO LOW. SMALL M-CLASS FLARES ARE STILL PROBABLE FROM REGION 3643.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED FOR THE PAST 24 HOURS AND IS EXPECTED TO REMAIN UNSETTLED FOR 21 MAR AND MOST OF 22 MAR. ACTIVE CONDITIONS ARE EXPECTED LATE 22 MAR THROUGH 23 MAR.

III. EVENT PROBABILITIES 21 MAR-23 MAR

CLASS M 60/60/50

CLASS X 05/05/02

PROTON 05/05/02

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 MAR 219

PREDICTED 21 MAR-23 MAR 215/200/190

90 DAY MEAN 20 MAR 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 MAR 011/012

ESTIMATED AFR/AP 20 MAR 014/015

PREDICTED AFR/AP 21 MAR-23 MAR 010/012-015/015-020/018

SOLTERWARN

BT

HXUS BOU 202200

PREDM 06021 06022 05023

PREDX 00521 00522 00223

PREDP 00521 00522 00223

PCAAFT 00121

TENCM 21521 20022 19023

AFRED 01021 01522 02023

AFAPF 01221 01522 01823

BT