

HFUS 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
ACCOMPANIED 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

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HXUS BOU 202200

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

BT