

END OF BUFFER

HFXS 1 BOU 211300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 080A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 21 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/1200Z TO 21/1200Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS. ROUGHLY 20 SMALL C-CLASS SUBFLARES WERE NOTED DURING THAT PERIOD. REGION 3643 (S07W55) IS STILL THE MOST COMPLEX APPEARING REGION, BUT IT HAS CLEARLY SIMPLIFIED AND DECAYED. THE REGION MAY BE CAPABLE OF AN ISOLATED ENERGETIC EVENT AS IT DECAYS - IT IS HARD TO SAY. CULGOORA REPORTED A TYPE II RADIO EVENT (PROBABLY FROM A BEHIND-THE-LIMB FLARE) AT 21/0422Z BUT NO X-RAY BURST WAS DETECTED AT THAT TIME. THUS, IT IS ASSUMED THE FLARE SOURCE WAS SEVERAL DAYS BEHIND THE EAST LIMB AND SHOULD APPEAR BY 24 MARCH.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE GENERALLY LOW WITH SOME CHANCE OF ISOLATED SMALL M-CLASS BURSTS, PRINCIPALLY FROM REGION 3543.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS GENERALLY UNSETTLED DURING THE PAST 24 HOURS. A BRIEF PERIOD OF ACTIVE CONDITIONS WAS NOTED FROM 0600 TO 0900Z TODAY. THE FIELD IS EXPECTED TO BECOME ACTIVE ON 23 MARCH AS A RESULT OF A FLURRY OF M-CLASS FLARES IN REGION 3643 A COUPLE OF DAYS AGO. A CORONAL HOLE, PRESENTLY NEAR CENTRAL MERIDIAN, SHOULD KEEP ACTIVITY LEVELS UP ON 24 MARCH.

III. EVENT PROBABILITIES 22 MAR-24 MAR

CLASS M 45/40/40

CLASS X 02/02/02

PROTON 02/02/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 MAR 219

ESTIMATED 21 MAR 211

PREDICTED 22 MAR-24 MAR 200/190/195

90 DAY MEAN 20 MAR 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR 19 MAR 011 AP 20 MAR 014

ESTIMATED AFR 20 MAR 013 AFR/AP 21 MAR 015/016

PREDICTED AFR/AP 22 MAR-24 MAR 015/015-020/018-018/016

SOLTERWARN

BT

HFXS BOU 211300

PREDM 04522 04023 04024

PREDX 00222 00223 00224

PREDP 00222 00223 00124

PCAF 00122

TENCM 20022 19023 19524

AFRED 01522 02023 01824

AFAPF 01522 01823 01624

KKK 23343 32233 34433

RT

HFUS 3 BOU 212200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 080B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 21 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 21/1200Z TO 21/2100Z: SOLAR ACTIVITY HAS BEEN LOW THIS PERIOD. THE LARGEST EVENT WAS A C9/1B AT 21/1905 UT IN REGION 3643 (S06W64). THUS, THIS REGION, ALTHOUGH DECAYING, STILL REMAINS ACTIVE AND MAY STILL HAVE A DELTA MAGNETIC CONFIGURATION. A C4/SB AT 21/1757 UT FROM REGION 3650 (N19E05) PRODUCED A TYPE II RADIO BURST AND A 245 MHZ BURST OF 1000 FLUX UNITS. SEVERAL REGIONS ON THE DISK POSSES THE ABILITY TO PRODUCE SMALL FLARES, BUT NONE HAVE A STRONG REGION GRADIENT. ONE NEW REGION WAS CONFIRMED TODAY, 3656 (S13E69).

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW WITH A POSSIBILITY OF AN ISOLATED M-CLASS FLARE IN REGION 3643.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD BECAME ACTIVE TODAY. ACTIVE CONDITIONS ARE EXPECTED TO REMAIN DUE INITIALLY TO FLARE ACTIVITY AND FINALLY TO A CORONAL HOLE NOW PASSING CENTRAL MERIDIAN.

III. EVENT PROBABILITIES 22 MAR-24 MAR

CLASS M 45/40/40

CLASS X 02/02/02

PROTON 02/02/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 MAR 214

PREDICTED 22 MAR-24 MAR 200/190/185

90 DAY MEAN 21 MAR 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 MAR 012/014

ESTIMATED AFR/AP 21 MAR 018/020

PREDICTED AFR/AP 22 MAR-24 MAR 015/015-020/018-018/016

SOLTERWARN

BT

HXUS BOU 212200

PREDM 04522 04023 04024

PREDX 00222 00223 00224

PREDP 00222 00223 00124

PCAF 00122

TENCM 20022 19023 18524

AFRED 01522 02023 01824

AFAPF 01522 01823 01624

BT