

HFUS 1 BOU 131300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 103A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 13 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 12/1200Z TO 13/1200Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS WITH ONLY MINOR C-CLASS FLARE ACTIVITY. THE LARGEST EVENT OBSERVED DURING THIS PERIOD WAS A C5/SB FLARE IN REGION 3684 (S26E06) AT 12/1613Z MAXIMUM. SLOW DECAY AND SLIGHT RESTRUCTURING MARKS THIS UNIMPRESSIVE REGION. THE INTERACTION BETWEEN REGIONS 3688 (N16W16) AND 3679 (N12W12) HAS RESULTED IN MINOR SUBFLARE PRODUCTION IN THE TRAILER PORTION OF 3688 WHERE OPPOSITE POLARITY SPOTS ARE CONVERGING. GROWTH AND EMERGING FLUX CONTINUE IN THE CENTRAL AND LEADING PORTION OF 3688, MAKING IT THE MOST IMPRESSIVE OF THE DISK REGIONS. REGION 3687, A REVERSE POLARITY GROUP AT S10E26 HAS PRODUCED MINOR SUBFLARE ACTIVITY AS ITS COMPLEXITY INCREASES. REGION 3671 (N07W85) CONTINUES ACTIVE AS IT ROTATES OVER WEST LIMB, PRODUCING BRIGHT SURGES AND LOOP STRUCTURES DURING THE PAST FEW HOURS. A LARGE H-TYPE SPOT IS TRANSITING EAST LIMB AT N02 AND COULD BE THE RETURN OF OLD SESC REGION 3652 (N03, CAR 037) WHICH WAS INACTIVE LAST ROTATION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW. REGION 3688 APPEARS TO BE THE ONLY DISK REGION CAPABLE OF M-CLASS ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT LOW ACTIVE TO UNSETTLED LEVELS FOR THE PAST 24 HOURS. UNSETTLED CONDITIONS ARE EXPECTED TO CONTINUE THROUGH THE FORECAST PERIOD. A LARGE BUSHY FILAMENT LOCATED BETWEEN N30W40 AND N55W20 (11/1400Z) DISAPPEARED SOMETIME BEFORE 12/1500Z. A SLIGHT GEOMAGNETIC RESPONSE IS POSSIBLE BY THE END OF THE PERIOD IF THIS FILAMENT DID IN FACT ERUPT.

III. EVENT PROBABILITIES 14 APR-16 APR

CLASS M 50/50/50

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 APR 178

ESTIMATED 13 APR 176

PREDICTED 14 APR-16 APR 179/182/186

90 DAY MEAN 12 APR 202

V. GEOMAGNETIC A INDICES

OBSERVED AFR 11 APR 035 VAP 12 APR 015

ESTIMATED AFR 12 APR 014 AFR/AP 13 APR 015/012

PREDICTED AFR/AP 14 APR-16 APR 010/012-008/012-008/013

SOLTERWARN

BT

HXUS BOU 131300

PREDM 05014 05015 05016

PREDX 00114 00115 00116

PREDP 00114 00115 00116

PCAF 00114

TENCM 17914 18215 18616

AFRED 01014 00815 00816

AFAPF 01214 01215 01316

KKK 33233 22222 33222

BT

HFUS 3 BOU 132200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 103B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 13 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
13/1200Z TO 13/2100Z: SOLAR ACTIVITY HAS BEEN LOW WITH NO EVENTS
EXCEEDING C2 INTENSITY. REGION 3679/3688(N12W20) DOMINATES THE
DISK WITH ITS COMPLEX BUT MODEST SPOT GROUP. SMALL NEW GROUPS
HAVE APPEARED AT S05W39 (REGION 3693), N23E15(REGION 3694) AND
N05E73(REGION 3695). NO SIGNIFICANT GROWTH HAS BEEN REPORTED IN
RECENT HOURS. EAST LIMB IS QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
REMAIN LOW. AN ISOLATED SMALL CLASS M EVENT IS POSSIBLE FROM
REGION 3688 OR EVEN REGION 3675(S14W61) SOMETIME IN THE NEXT
THREE DAYS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN QUIET FOR THE PAST NINE HOURS. CONDITIONS ARE EXPECTED TO
REMAIN MOSTLY QUIET UNTIL THE THIRD DAY OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 14 APR-16 APR

CLASS M 50/40/30

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 APR 1170

PREDICTED 14 APR-16 APR 1168/165/160

90 DAY MEAN 13 APR 202

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 12 APR 013/015

ESTIMATED AFR/AP 13 APR 010/012

PREDICTED AFR/AP 14 APR-16 APR 010/012-008/012-012/013

SOLTERWARN

BT

HXUS BOU 132200

PREDM 05014 04015 03016

PREDX 00114 00115 00116

PREDP 00114 00115 00116

PCAF 00114

TENCM 16814 16515 16016

AFRED 01014 00815 01216

AFAPF 01214 01215 01316

RT