

HFXS 1 BOU 241300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 114A
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 24 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/1200Z TO 24/1200Z: SOLAR ACTIVITY HAS REMAINED LOW AS THE RATE OF GROWTH OF ACTIVE REGIONS HAS DECREASED. THE SEVERAL SMALL SPOT GROUPS IN THE NE QUADRANT ARE LARGER AND MORE COMPLEX BUT THE RATE OF EVOLUTION IS RELATIVELY SLOW. THE LARGEST X-RAY EVENT TODAY HAS BEEN C3 FROM REGION 3703(N18E05). A MINOR NEW REGION AT S03W42 HAS BEEN NUMBERED 3709. NO SIGNIFICANT ACTIVITY IS REPORTED AT EAST LIMB.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE AS GROWTH CONTINUES SLOWLY IN THE SEVERAL REGIONS WITHIN THE NE COMPLEX. CLASS M EVENTS ARE EXPECTED TO OCCUR ONLY ONCE EVERY SECOND DAY UNLESS THE RATE OF FLUX EMERGENCE ACCELERATES.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED FOR THE PAST 24 HOURS. UNSETLED TO QUIET CONDITIONS ARE EXPECTED FOR THE NEXT 12 HOURS. A MAJOR MAGNETIC STORM MAY BEGIN DURING THE EARLY PART OF 25 APRIL AND CONTINUE FOR 48 HOURS. K-INDICES AS HIGH AS 6 SHOULD BE EXPECTED AND A 24-HOUR A-INDEX OF 70 COULD OCCUR DEPENDING ON THE TIME OF STORM COMMENCEMENT.

III. EVENT PROBABILITIES 25 APR-27 APR

CLASS M 50/60/60
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 APR 173
ESTIMATED 24 APR 176
PREDICTED 25 APR-27 APR 180/177/173
90 DAY MEAN 23 APR 202

V. GEOMAGNETIC A INDICES

OBSERVED AFR 22 APR 016 AP 23 APR 011
ESTIMATED AFR 23 APR 011 AFR/AP 24 APR 007/015
PREDICTED AFR/AP 25 APR-27 APR 030/030-040/035-015/016
SOLTERWARN
BT

HXUS BOU 241300
PREDM 05025 06026 06027
PREDX 00125 00126 00127
PREDP 00125 00126 00127
PCAFT 00125
TENCM 18025 17726 17327
AFRED 03025 04026 01527
AFAPF 03025 03526 01627
KKK 22255 43334 56543
BT

HFXS 3 BOU 242200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 114B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 24 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/1200Z TO 24/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 9 HOURS. ONLY 8 SMALL C-CLASS SUBFLARES HAVE BEEN OBSERVED DURING THAT PERIOD, MOSTLY FROM REGION 3707 (N10E03). BOTH REGIONS 3703 (N18W01) AND 3707 HAVE SHOWN SOME GROWTH TODAY AND HAVE APPEARED TO BE INTERACTING WITH EACH OTHER. REGION 3706 (N22E22) HAS GROWN IN COMPLEXITY SINCE YESTERDAY. REGION 3710 (N24E14) WAS NUMBERED TODAY. 3710 IS A NEW MEMBER OF THE COMPLEX OF REGIONS SURROUNDING REGION 3707.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE AS GROWTH AND RESTRUCTURING CONTINUES IN THE NORTHEAST COMPLEX. MODERATE M-CLASS FLARES ARE MORE LIKELY AS THE REGIONS OF THE COMPLEX INTERACT WITH EACH OTHER.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN MILDLY UNSETLED DURING THE PAST 9 HOURS. A GEOMAGNETIC SUDDEN COMMENCEMENT OF 43 GAMMAS OCCURRED AT 24/2023Z. THIS WAS ACCCOMPANIED BY A VERY PRONOUNCED INCREASE IN SOLAR WIND VELOCITY AND DENSITY. CONDITIONS ARE EXPECTED TO BE UNSETLED TO ACTIVE UNTIL A MAJOR GEOMAGNETIC STORM MAIN PHASE DEVELOPS ON APRIL 25TH.

III. EVENT PROBABILITIES 25 APR-27 APR

CLASS M 50/60/60

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 APR 179

PREDICTED 25 APR-27 APR 184/188/187

90 DAY MEAN 24 APR 202

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 23 APR 009/011

ESTIMATED AFR/AP 24 APR 012/015

PREDICTED AFR/AP 25 APR-27 APR 045/030-030/035-015/016

SOLTERWARN

BT

HXUS BOU 242200
PREDM 05025 06026 06027
PREDX 00125 00126 00127
PREDP 00125 00126 00127
PCAFT 00125
TENCM 18425 18826 18727
AFRED 04525 03026 01527
AFAPF 03025 03526 01627
BT