

HFUS 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 UNSETTLED FOR THE PAST 24 HOURS. UNSETTLED 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  
 TENCN 18025 17726 17327  
 AFRED 03025 04026 01527  
 AFAPF 03025 03526 01627  
 KKK 22255 43334 56543  
 BT

HFUS 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 UNSETTLED DURING THE PAST 9 HOURS. A GEOMAGNETIC  
SUDDEN COMMENCEMENT OF 43 GAMMAS OCCURRED AT 24/2023Z. THIS WAS  
ACCOMPANIED BY A VERY PRONOUNCED INCREASE IN SOLAR WIND  
VELOCITY AND DENSITY. CONDITIONS ARE EXPECTED TO BE UNSETTLED  
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

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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