

HFUS 1 BOU 251300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 115A  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1300Z 25 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/1200Z TO 25/1200Z: SOLAR ACTIVITY CONTINUES LOW IN SPITE OF CONTINUED SLOW GROWTH IN A LARGE COMPLEX OF SUNSPOT GROUPS NEAR THE NORTH CENTRAL MERIDIAN OF THE SUN. NO X-RAY EVENT HAS EXCEEDED C2 TODAY. GROWTH HAS BEEN OBSERVED IN SIX ACTIVITY CENTERS AND FOUR REGIONS ARE SLOWLY MERGING AND INTERACTING. SUCH EVOLUTION USUALLY LEADS TO MAJOR FLARES. A LARGE FILAMENT AT N35E21 DISAPPEARED BY 0815Z. THIS FILAMENT LAY ON THE NORTHEAST BORDER OF THE LARGE -SCALE MAGNETIC PATTERN CONTAINING EIGHT ACTIVE REGIONS AND THE SITE OF THE LARGE ERUPTION OF 22 APRIL WHICH LED TO THE PRESENT GEOMAGNETIC STORM. NO ACTIVITY IS REPORTED AT EAST LIMB.

IB. SOLAR ACTIVITY FORECAST: MAJOR FLARES ARE EXPECTED AT INTERVALS OF 36 HOURS IF GROWTH AND INTERACTION CONTINUE IN THE LARGE NCENTRAL ACTIVITY COMPLEX.

II. GEOPHYSICAL SUMMARY AND FORECAST: QUIET CONDITIONS CEASED WITH A SUDDEN COMMENCEMENT OF MAGNETIC STORM AT 24/2023Z OF 43 GAMMAS. ACTIVITY HAS STEADILY INCREASED AND PRESENTLY DISPLAYS A MAIN PHASE OF MAJOR STORM. A K-INDEX OF 7 WAS RECORDED FOR 0900-1200Z. THIS STORM IS EXPECTED TO CONTINUE FOR ANOTHER 24 HOURS. UNSETTLED CONDITIONS WILL FOLLOW FOR ONLY A DAY OR TWO BEFORE THE ARRIVAL OF ANOTHER STORM OF LESSER INTENSITY LATE ON 28 APRIL.

III. EVENT PROBABILITIES 26 APR-28 APR

CLASS M 60/60/60  
CLASS X 05/05/05  
PROTON 01/01/01  
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	24 APR	179
ESTIMATED	25 APR	184
PREDICTED	26 APR-28 APR	188/191/189
90 DAY MEAN	24 APR	202

V. GEOMAGNETIC A INDICES

OBSERVED AFR	23 APR	009	AP 24 APR 012
ESTIMATED AFR	24 APR	012	AFR/AP 25 APR 048/050
PREDICTED AFR/AP	26 APR-28 APR	040/035-015/016-020/022	

SOLTERWARN

BT

HXUS BOU 251300  
PREDM 06026 06027 06028  
PREDX 00526 00527 00528  
PREDP 00126 00127 00128  
PCAFT 00126  
TENCM 18826 19127 18928  
AFRED 04026 01527 02028  
AFAPF 03526 01627 02228  
KKK 54455 43345 54332  
BT

HFXS 3 BOU 252200  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 115B  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 25 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 25/1200Z TO 25/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW DURING THE PAST 9 HOURS DESPITE THE CONTINUED SLOW GROWTH AND RESTRUCTURING OCCURRING IN THE LARGE COMPLEX OF REGIONS IN THE CENTER OF THE NORTHERN HEMISPHERE OF THE SUN. ONLY 5 SMALL C-CLASS SUBFLARES HAVE BEEN NOTED SINCE 1200Z.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO INCREASE TO MODERATE LEVELS AT SOME POINT SOON. THE NORTH CENTRAL COMPLEX IS AMAZINGLY QUIET AT THE MOMENT.

II. GEOPHYSICAL SUMMARY AND FORECAST: A MAJOR GEOMAGNETIC STORM IS IN PROGRESS ALTHOUGH THE FIELD HAS ONLY BEEN UNSETLED SINCE 25/1500Z. PLASMA WAVE SENSORS ON THE ISEE-3 SPACECRAFT HAVE BEEN DISTURBED ALL DAY. THIS IS THOUGHT TO PORTEND CONTINUATION OF THE MAJOR STORM ACTIVITY THROUGH THE NEXT 24 HOURS.

III. EVENT PROBABILITIES 26 APR-28 APR

CLASS M 60/60/60

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 APR 183

PREDICTED 26 APR-28 APR 187/190/188

90 DAY MEAN 25 APR 202

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 24 APR 019/012

ESTIMATED AFR/AP 25 APR 041/040

PREDICTED AFR/AP 26 APR-28 APR 040/022-015/016-020/022

SOLTERWARN

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HFXS BOU 252200  
PREDM 06026 06027 06028  
PREDX 00526 00527 00528  
PREDP 00126 00127 00128  
PCAF 00126  
TENCM 18726 19027 18828  
AFRED 04026 01527 02028  
AFAPF 02226 01627 02228  
BT