

PREDP 00524 00125 00126  
PCAFT 00124  
TENCM 12024 11025 10526  
AFRED 01224 01525 01226  
AFAPF 02024 02525 01526  
KKK 33344 33333 45443  
BT

HFUS 1 BOU 231300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 204A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 23 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
22/1200Z TO 23/1200Z: SOLAR ACTIVITY REMAINS MODERATE. REGION  
3804 (N15WLIMB YESTERDAY) PRODUCED AN M4/1F FLARE AT 1643Z AT  
N15W90 FOLLOWED BY A LOOP PROMINENCE SYSTEM BEGINNING AT 1739Z  
FROM BEHIND THE LIMB. THIS FLARE ALSO HAD A MODERATE RADIO  
BURST WITH TYPE II EMISSION AND IT PRODUCED A PARTICLE EVENT  
(SEE PART II). FOUR C-CLASS XRAY EVENTS FROM REGIONS 3810  
(N14W72) AND 3812 (N21W69) WERE THE ONLY OTHER EVENTS REPORTED  
TODAY. REGION 3810 AND 3812, AS WELL AS THE OTHER SIX REGIONS  
ON THE DISK, ARE SMALL AND STABLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE  
LOW FROM THE REGIONS ON THE DISK BUT AN ISOLATED M-CLASS FLARE  
FROM REGION 3804 STILL SEEMS POSSIBLE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN UNSETTLED. UNSETTLED TO SLIGHTLY ACTIVE CONDITIONS ARE  
EXPECTED DURING THE FORECAST PERIOD. THE 1643Z M4 FLARE  
PRODUCED A PROTON EVENT AT SATELLITE ALTITUDES BEGINNING 2030Z.  
THE MAXIMUM OF THE EVENT WAS 240 P/CM2/SEC/STER AT 0220Z AND IT  
IS 13 P/CM2/SEC/STER AT 1200Z. AT GROUND LEVEL A WEAK POLAR CAP  
ABSORPTION EVENT BEGAN AT 2345Z, MAXED AT 0100Z WITH 3DB  
ABSORPTION, AND ENDED AT 0715Z. CONTINUED FLARE ACTIVITY FROM  
BEYOND THE LIMB IN REGION 3804 COULD RESULT IN ANOTHER PARTICLE  
EVENT IN THE NEXT 36 HOURS.

III. EVENT PROBABILITIES 24 JUL-26 JUL

CLASS M 40/30/20

CLASS X 01/01/01

PROTON 05/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 JUL 145

ESTIMATED 23 JUL 130

PREDICTED 24 JUL-26 JUL 120/110/105

90 DAY MEAN 22 JUL 160

V. GEOMAGNETIC A INDICES

OBSERVED AFR 21 JUL 011 AP 22 JUL 016

ESTIMATED AFR 22 JUL 014 AFR/AP 23 JUL 012/012

PREDICTED AFR/AP 24 JUL-26 JUL 012/020-015/025-012/015

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HFUS 3 BOU 232200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 204B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 23 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
23/1200Z TO 23/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THIS  
PERIOD. REGIONS ARE SMALL AND SIMPLE WITH ONLY MINOR C CLASS  
EVENTS BEING OBSERVED. NEW REGION TODAY 3823 (S05E12) IS A "B"  
TYPE WITH TWO SPOTS VISIBLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE  
LOW DURING THIS FORECAST PERIOD, HOWEVER REGION 3804 (NW17) MAY  
STILL PRODUCE AN M-CLASS EVENT DURING THE NEXT 18 HOURS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN ACTIVE THIS PERIOD. THE FIELD IS EXPECTED TO BE GENERALLY  
UNSETTLED DURING THE FORECAST PERIOD. THE PROTON EVENT WHICH  
BEGAN 22/2030UT AND REACHED MAXIMUM ON 23/0125UT, 240  
P/CM2/SEC/STER AT GREATER THAN 10MEV, ENDED AT 23/1225UT.

III. EVENT PROBABILITIES 24 JUL-26 JUL

CLASS M 40/30/20

CLASS X 01/01/01

PROTON 05/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 JUL 125

PREDICTED 24 JUL-26 JUL 110/105/100

90 DAY MEAN 23 JUL 165

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 JUL 019/016

ESTIMATED AFR/AP 23 JUL 012/014

PREDICTED AFR/AP 24 JUL-26 JUL 012/020-015/025-012/015

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HXUS BOU 232200

PREDM 04024 03025 02026

PREDX 00124 00125 00126

PREDP 00524 00125 00126

PCAFT 00124

TENCM 11024 10525 10026

AFRED 01224 01525 01226

AFAPF 02024 02525 01526

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