

HFUS 3 BOU 130600

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, CO

SDF NUMBER 044A

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 0600Z 13 FEB 1978

IA. A LONG RISE-FALL M-7 EVENT BEGAN AT 13/0122Z IN REGION  
1001 (N14W20). THIS EVENT REACHED MAXIMUM AT 0256Z AND LEVELS ARE STILL  
ENHANCED. OPTICALLY, THE EVENT APPEARED TO CONSIST OF SEVERAL SMALL  
FLARES, RANGING FROM SUBNORMAL TO 2 NORMAL. TYPE II - TYPE IV  
RADIO SWEEP AND A GREATER THAN 750 FLUX UNIT BURST AT 2695 MHZ ACC-  
COMPANIED THE FLARE. ALL OTHER REGIONS HAVE BEEN REPORTED QUIET.  
IB. SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT A MODERATE LEVEL FROM  
REGION 1001, AND TO A LESSER DEGREE FROM REGIONS 998 (N27W 62) AND  
1006 (S27 W20).

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET THE PAST 24 HOURS. GENERALLY  
UNSETTLED CONDITIONS WITH SOME INCREASE TO MORE ACTIVE LEVELS AT THE  
END OF THE FORECAST PERIOD ARE EXPECTED.  
A LOW ENERGY PARTICLE EVENT IS EXPECTED FROM THE 13/0256Z M-7 EVENT,  
BUT IT SHOULD NOT REACH PROTON EVENT CRITERIA.

III. EVENT PROBABILITIES 13-15 FEB

CLASS M 90/90/90

CLASS X 50/50/50

PROTON 50/50/50

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 FEB 163

PREDICTED 13-15 FEB 160/156/156

90-DAY MEAN 12 FEB 112

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 11 FEB 04

ESTIMATED AFR/AP 12 FEB 05/05

PREDICTED AFR/AP 13-15 FEB 08/10 - 12/20 - 20/25

SOLTERWARN

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HFUS 3 BOU 131500

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 044B

JOINT AFGWC/SESC SECONDARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 1500Z 13 FEBRUARY 1978

IA. SOLAR ACTIVITY CONTINUES AT A MODERATE LEVEL. HOWEVER, ACTIVITY HAS DECREASED SLIGHTLY SINCE THE M-7 X-RAY BURST AT 13/0255 U.T. (MAX). REGION 1001 (N14W25) HAS RETAINED ITS THREATENING APPEARANCE SINCE THAT TIME WHILE THE OTHER DISK FEATURES HAVE SHOWN LITTLE CHANGE.

IB. SOLAR ACTIVITY WILL BE AT A MODERATE TO HIGH LEVEL DURING THE NEXT 24 HOURS. A PROTON EVENT IS IN PROGRESS WITH THE GREATER THAN 10 MEV FLUX READING 100 PROTONS/CM2/SEC/STER AT 13/1400 U.T. PEAK FLUXES ARE EXPECTED TO REACH NEAR 500 PROTONS/CM2/SEC/STER ABOUT 2200 U.T. ON 13 FEB. A PCA IS IN PROGRESS WITH 1.3 DB ABSORPTION OBSERVED AT 13/1415 U.T.

II. THE GEOMAGNETIC FIELD IS QUIET TO UNSETTLED. A GRADUAL INCREASE IN THE FIELD LEVEL IS EXPECTED OVER THE NEXT 48 HOURS WITH THE FLARE INDUCED DISTURBANCE COMMENCING ON 15 FEB.

III. EVENT PROBABILITIES 13-15 FEB

CLASS M 90/90/90

CLASS X 50/50/50

PROTON 50/50/50

PCAF - IN PROGRESS, SEE PART II

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 FEB 163

PREDICTED 13-15 FEB 160/156/156

90-DAY MEAN 12 FEB 112

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 11 FEB 04

ESTIMATED AFR/AP 12 FEB 05/05

PREDICTED AFR/AP 13-15 FEB 08/10 - 12/20 - 30/35

SOLTERWARN

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HFUS 1 BOU 132200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 044

JOINT AFGWC/SESC PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 13 FEBRUARY 1978

IA. SOLAR ACTIVITY IS AT A MODERATE TO HIGH LEVEL. REGION 1001  
(N14W30) IS FLUCTUATING IN BRIGHTNESS WHILE SYSTEMATICALLY PRODUCING  
CLASS C X-RAY BURST WITH AN OCCASIONAL CLASS M X-RAY BURST INTER-  
SPERSED. THE LATEST CLASS M FROM THIS REGION OCCURRED AT 13/1905U.T.  
(MAX). THE CLASS M-7 AT 13/0122 U.T. HAD OPTICAL REPORTS THAT RANGED  
FROM SN TO 2B. THE GREATER THAN 10 MEV PARTICLE EMISSION (STARTED  
13/0930U.T.) ASSOCIATED WITH THIS EVENT IS FLUCTUATING NEAR THE 150  
PROTON/CM2/SEC/STER LEVEL. THE GENERAL TREND IS STILL UPWARD. A  
NEW H-TYPE SPOT IS VISIBLE NEAR N31E72 AND WILL BE NUMBERED REGION  
1007. THE OTHER VISIBLE REGIONS ARE ESSENTIALLY STABLE.

IB. SOLAR ACTIVITY WILL CONTINUE AT A MODERATE TO HIGH LEVEL. A  
PCA IS IN PROGRESS WITH ABSORPTION READINGS AS HIGH AS 3.5 DB.

II. THE GEOMAGNETIC FIELD IS GENERALLY QUIET. INCREASED GEOMAGNETIC  
ACTIVITY IS EXPECTED DURING THE NEXT 24-36 HOURS WITH THE LIKLIHOOD  
OF A MINOR STORM ON 15 FEB.

III. EVENT PROBABILITIES 14-16 FEB

CLASS M 90/90/90

CLASS X 50/50/50

PROTON 50/50/50

PCAF - IN PROGRESS (SEE PART II)

IV. OTTAWA 10.7 CM FLUX

OBSERVED 13 FEB 155

PREDICTED 14-16 FEB 151/148/146

90-DAY MEAN 13 FEB 112

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 12 FEB 07

ESTIMATED AFR/AP 13 FEB 06/06

PREDICTED AFR/AP 14-16 FEB 12/12 - 30/30 - 25/25

SOLTERWARN

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