

FUS 3 BCU 032200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 154

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 03 JUN 1983.

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 02/2100  
TO 03/2100Z: SOLAR ACTIVITY APPROACHED THE MODERATE LEVEL WITH  
THE OCCURRENCE OF TWO C8 XRAY EVENTS FROM REGION 4201 (S10E15).  
THE FIRST AT 1146Z MAXIMUM WAS ASSOCIATED WITH A 1B FLARE AND  
WAS ACCOMPANIED BY MINOR DISCRETE FREQUENCY RADIO BURSTS  
THROUGH THE SPECTRUM. THE SECOND, AT 1429Z MAXIMUM, WAS  
ASSOCIATED WITH SEVERAL SECONDARY MAXIMUMS BOTH OPTICALLY AND  
IN XRAY. REGION 4201 HAS PRODUCED FREQUENT EVENT LEVEL FLARES  
SINCE THIS SECOND EVENT. THE REGION, A COMPLEX BETA-GAMMA DELTA  
SPOT GROUP WITH SEVERAL OPPOSITE POLARITY SPOTS CROWDED  
TOGETHER IN ITS INTERNAL STRUCTURE, HAS DISPLAYED SLOW GROWTH  
DURING THE PERIOD. THE MAGNETIC GRADIENTS IN BOTH THE NORTHERN  
AND SOUTHERN CENTRAL PORTIONS OF THIS GROUP HAVE BEEN  
INCREASING AND HAVE BEEN THE SOURCE OF TODAY'S ACTIVITY. IN  
CONTRAST TO THIS REGION, THE REMAINING SPOTTED DISK REGIONS  
(FOUR) HAVE BEEN UNIMPRESSIVE. NO NEW GROUPS WERE NUMBERED  
TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE  
MODERATE. THE FREQUENT FLARE PRODUCTION CHARACTERISTICS OF  
REGION 4201 IS EXPECTED TO RESULT IN AT LEAST ONE M-CLASS XRAY  
EVENT EACH DAY. SINCE THIS REGION IS EXPENDING ITS ENERGY WITH  
FREQUENT SMALLER FLARES, AN X-CLASS EVENT IS MUCH LESS LIKELY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 02/2100Z TO 03/2100Z:  
THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED DURING THE PAST 24  
HOURS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS  
EXPECTED TO REMAIN AT UNSETTLED LEVELS THROUGH THE NEXT THREE  
DAYS WITH ISOLATED PERIODS AT ACTIVE LEVELS NEAR THE END OF THE  
THIRD DAY.

III. EVENT PROBABILITIES 04 JUN-06 JUN

CLASS M 75/75/75

CLASS X 10/10/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 03 JUN 135

PREDICTED 04 JUN-06 JUN 135/136/137

90 DAY MEAN 03 JUN 124

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 02 JUN 009/010

ESTIMATED AFR/AP 03 JUN 010/015

PREDICTED AFR/AP 04 JUN-06 JUN 010/015-010/015-008/015

SOLTERWARN

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